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INTRODUCTION

In this thesis an analysis will be made of medicine in Merovingian and Carolingian Gaul. The Merovingian period includes that era between the foundation of the Kingdom of the Franks by Clovis in 486 and the deposition of Chilperic III, in 751; the Carolingian period is the time between the accession of Pipin the Short, in 751 and the deposition of Charles the Fat in 887. The primary aim will be to present the factual evidence in the Regula Sancti Benedicti of Benedict (480-543), abbot of Monte Cassino; the De Gubernatione Dei of Salvian, a priest of the Church of Marseilles in the fifth century; the De Miraculis Sancti Martini, Historiae Francorum, Liber De Gloria Beatorum Martyrum, Liber De Gloria Confessorum, and Liber De Passione Virtutibus et Gloria Sancti Juliani of Gregory (c.538-593), bishop of Tours; the Chronicon of Marius (530-594), bishop of Avenches; in the Chronicon of Fredegarius (identity unknown- he seems to have been alive in 614); the Capitula, Didascalia^c, Epistolae, Elogium, Versus De Sanctis Euboricensis Ecclesiae of Alcuin (735-804), Master of the Palace School of Charlemagne; the Annales, Epistolae and Vita Karoli of Eginhard (770-840), Secretary of Charlemagne; the De Poenitentia and Liber Poenitentialis of Halitgarius, bishop of Cambrai in 817; the De Artibus Liberalibus and Epistola de duplici solis eclipsi of Dungal (c.820), an Irish monk and teacher who emigrated to France; the In Xenodochio of Theodulfe (c.760-821), bishop of Orleans; the Vita Sancti Sturmi of Eigil^{abbot} of Fulda in 822; the Epistolae of Lupus (805-862), abbot of Ferrieres; the Vita

Sancti Galli and De Cultura Hortorum of Walafrid Strabo (d.859), abbot of Richenau; the De Universo of Raban Maur (c.776-856), abbot of Fulda; the Annales and Capitula Syndica of Hincmar (806-882), archbishop of Rheims; the Vita Sancti Anskarii ^{of Rimbert} (d.888), archbishop of Bremen-Hamburg; the Gesta Karoli of Notker (840-912), a monk of Saint Gall; and various anonymous works and capitularies. A secondary purpose will be to interpret the feelings and ideas of the people of Merovingian and Carolingian Gaul toward medicine. A tertiary purpose will be an explanation and estimate of medieval medical allusions in the light of modern medicine.

The same method of procedure will be followed for Merovingian and Carolingian medicine. Consideration will be given first, to the diseases and remedies; secondly, to the men who treated these diseases; thirdly, to the equipment with which the doctors worked; and fourthly, to the question of hospitals. The study of diseases will be divided into general, contagious, and non-contagious. The non-contagious diseases will be organized as: (1) diseases of the nervous system; (2) of the digestive system; (3) of the circulatory system; (4) constitutional diseases; (5) diseases of the respiratory system; and (6) miscellaneous disorders. Each disease will be treated, so far as the historical evidence permits, in regard to causes, symptoms, and remedies. Distinctions will be drawn between spiritual and physical causes and remedies; and between religious and secular doctors and hospitals.

CHAPTER I

DISEASES AND REMEDIES OF THE MEROVINGIAN FRANKS

The Merovingian sources contain material of medical significance in regard to various diseases and remedies of both a general and a specific character. For general diseases there were a variety of cures. Influenza, ¹ cholera, ² scurvy, ³ hemorrhoids, ⁴ and cancer, ⁵ were the most frequent.

PART I - MEROVINGIAN MEDICINE

1. Gregorius, *Historia Francorum*, III, 34; IV, 28; X, 3, 13; and De Viris Illis *Historia*, II, 18; III, 30. Also Walafriedus Strabo, *Vita Caroli*, III, 11, 12, 13, 14, 15, 16, 17, 18; Walfridus, *De Obsequiis Caroli*, I, 1; 7, 1; and *Annales*, *Samuilis*, Anno 871.
2. Greg., *Hist. Franc.*, IV, 28; VI, 17; and *Liber de Gloria Caroli*, XIV.
3. Greg., *Hist. Franc.*, V, 17, 18; IX, 13; X, 3, 25, 26, 27. Also *Walfridus*, *De Obsequiis Caroli*, V, 1; VI, 13; VII, 1; and *Annales*, *Carolus*, An. 870.
4. Greg., *Hist. Franc.*, V, 17; *Vir. Mart.*, II, 38; III, 34, 35; and *Liber de Gloria Caroli*, XIV. Also *Walafriedus*, *op. cit.*, II, 27.
5. Greg., *Hist. Franc.*, I, 43; III, 34; IV, 34; VI, 15; X, 13, 20; and *Walfridus*, *op. cit.*, V, 1.
6. *Walafriedus*, *op. cit.*, I, 25; II, 33.
7. Greg., *Hist. Franc.*, VI, 14.
8. *Ibid.*, IV, 28; VI, 15.
9. *Ibid.*, IX, 13; *Vir. Mart.*, III, 34; and *Walafriedus*, *op. cit.*, II, 27.
10. Greg., *Vir. Mart.*, II, 11.
11. Greg., *Hist. Franc.*, VI, 13.
12. *Ibid.*, V, 35; X, 25, 26; and *Vir. Mart.*, II, 38, 39; IV, 1; IV, 13, 17. Also Greg., *Liber de Gloria Caroli*, XI and *Walafriedus*, *op. cit.*, II, 29.

CHAPTER I

DISEASES AND REMEDIES OF THE MEROVINGIAN FRANKS

The Merovingian sources contain material of medical significance in regard to various diseases and remedies of both a general and a specific character. For general disorders there were a variety of terms. Infirmitas,¹ infirmus,² morbus,³ aegritudo,⁴ and aegrotare,⁵ were the most frequently employed for the diseases, but valetudo contraria,⁶ valetudo maligna,⁷ humor,⁸ languor,⁹ debilitas,¹⁰ and incommodus,¹¹ were also used. For pain in a specific part dolor¹² is more

1. Gregorius, Historiae Francorum, III,36; IV,32; X,3, 15, and De Miraculis Sancti Martini, II,18; III,36. Also Walafri-
dus Strabus, Vita Sancti Galli, II,6,8,14,27,39; Salvianus,
De Gubernatione Dei, I,3; V,1; and Marius, Chronicam, Anno 571.

2. Greg., Hist. Franc., IV,36; VI,6, and Liber de Gloria
Confessorum, XXIV.

3. Greg., Hist. Franc., V,17,35; IX,13; X,3,25,29,30. Also
Salvian., De Guber. Dei, V,1; VI,16; VII,4, and Marius, Chron., An.
569, 570.

4. Greg., Hist. Franc., V,37; Mir. Mart., II,52; III,34,
44; and Lib. De Glor. Confess., XXIV. Also Walafrid. op. cit. II,27.

5. Greg., Hist. Franc., I,43; III,36; IV,16; VI,15; X,
29,30, and Salvian., op. cit., V,1.

6. Walafrid., op. cit., I,22; II,33.

7. Greg., Hist. Franc., VI,14.

8. Ibid., IV,32; VI,15.

9. Ibid., IX,13; Mir. Mart., III,34; and Walafrid., op. cit.,
II,18.

10. Greg., Mir. Mart., II,11.

11. Greg., Hist. Franc., VI,15.

12. Ibid., V,35; X,29,30, and Mir. Mart., II,2,52,58;
IV,1; IV,15,17. Also Greg., Lib. De Glor. Confess., XL and
Walafrid., op. cit., II,39.

often found, while labor¹³ and laboro¹⁴ indicate the same condition. For general remedies the terms medela,¹⁵ remedium,¹⁶ and agridium,¹⁷ were used. Cura,¹⁸ curo,¹⁹ medeor,²⁰ succurro,²¹ described the cure itself. The resultant health was indicated by sanitas,²² sanus,²³ sopitas,²⁴ salus,²⁵ valitudo,²⁶ and salubritas,²⁷ According to Salvian, the doctors ordered a definite regimen which the patient must follow if he hoped for a cure.²⁸ The same writer mentioned prescriptions (praecepta) which, one infers, would cure a patient who followed them.²⁹

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13. Greg., Hist. Franc., V, 35.
 14. Mir. Mart., III, 36.
 15. Greg., Mir. Mart., I, 37; II, 56; III, 21.
 16. Greg., Hist. Franc., IV, 32; Walafrid., op. cit., II, 27; Salvian., op. cit., VII, 1.
 17. Greg., Mir. Mart., III, 60.
 18. Salvian., op. cit., VI, 16.
 19. Greg., Hist. Franc., IV, 32.
 20. Ibid., V, 35; Mir. Mart., IV, 1; and Lib. De. Glor. Confess., XXIV.
 21. Salvian., op. cit., VI, 16.
 22. Greg., Hist. Franc., IV, 36; Mir. Mart., II, 55; and Walafrid. op. cit., I, 31; II, 27, 30.
 23. Greg., Mir. Mart., III, 46, 49; IV, 1; and Salvian., op. cit., VII, 4.
 24. Greg., Mir. Mart., II, 6; III, 39, 44; and Walafrid., op. cit., II, 8.
 25. Greg., Hist. Franc., X, 25 and Salvian., op. cit., V, 1; VI, 16.
 26. Greg., Hist. Franc., VI, 15; Mir. Mart., III, 6; IV, 33.
 27. Greg., Hist. Franc., X, 3.
 28. De Guber. Dei, V, 1. "....aut sanare quem quam observantia valeat, quam medicus ei imperat ei si eam sibi aegrotus ipse non praestat."
 29. Loc. cit. "Quasi vero curare ullam infirmitatem praecepta possint, si eis non oboedierit infirmus...."

specific diseases, cf. infra, p. 14, note 131.

32. Mir. Mart., III, 60. "O theriacum incommensabile! O pigmentum ineffabile! O antidotum laudabile! O purgatorium, ut nos dicant, coeleste, quod medicorum vinoli argutiae, arvensium suavitates superat, unguentorumque cunius robora supercrescit! quod mandat ventrem ut agridium, pulchrum ut hyssopus, ipsaque caput purgat, ut peritrusus."

33. Hist. Franc., VII, 2. According to Salvian (Gregory of Tours, History of the Franks, II, 564, note 22), the practice of placing herbs on the tombs of miracle-working saints was general.

34. Cf. infra, pp. 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

Something of the nature of these prescriptions and the other types of remedies employed is revealed by Salvian in the following passage:

As the best and most skillful doctors give different cures for various diseases and succor some by sweet, others by bitter drugs; cure certain ills by cautery, others by soothing poultices; employ ruthless surgery for some, but pour healing oil on others; seeking the same good health by utterly different cures...³⁰

According to Gregory, the most efficacious general remedy was the drink mixed with ashes in wine (delibutum cum vino pulverem ad bibendum) from the sepulchre of Saint Martin. He enumerated some of its powers:³¹

Oh infallible antidote! Oh incomparable medicine! Oh purgative which I should call celestial for it overcomes the subtleties of the medical profession and surpasses the agreeable quality of spices and the strength of all unguents. It cleanses the stomach as an aid for the sick, the lung as hyssop, and the head it purges as the herb peretrum.³²

Gregory also alluded to the consecrated herbs which derived miraculous healing powers when placed on the tomb of Saint Martin.³³ The frequent use of oil as a remedy will be discussed in connection with the specific diseases.³⁴

30. De Gub. Dei VI, 16. "Sicut enim optimi ac peritissimi medici dissimilibus morbis curas dispares praestant atque aliis per dulcia medicamina aliis per amara succurrunt, et quosdam curant cauteriorum adustione, quosdam malagmatum placabilitate, aliis adhibent duram ferri prosectionem, aliis blandam infundunt olei lenitatem, et tamen diverissimis licet curis eadem salus quaeritur..."

31. For discussion of the efficacy of this drink for specific diseases, cf. infra, p. 14, note 131.

32. Mir. Mart., III, 60. "O theriacam inenarrabilem! O pigmentum ineffabile! O antidotum laudabile! O purgatorium, ut ita dicam, coeleste, quod medicorum vincit argutias, aromatum suavitates superat, unguentorumque omnium robora supercrescit! quod mundat ventrem ut agridium, pulmonem ut hyssopus, ipsumque caput purgat, ut peretrum."

33. Hist. Franc., VII, 2. According to Dalton (Gregory of Tours, History of the Franks, II, 564, note 12), the practice of placing herbs on the tombs of miracle-working saints was general.

34. Cf. infra, pp. 10, 14, 26, 32, 44, 45, 63, 71.

The specific diseases can be classified as contagious and non-contagious. In consideration of contagious diseases, one finds that Gregory described them in detailed fashion, while his continuators and Salvian merely mentioned them. The general term most frequently used for these plagues was lues;³⁵ but clades glandolaria³⁶ or merely clades,³⁷ pestilentia,³⁸ horror,³⁹ pestis,⁴⁰ contagium,⁴¹ and even such ordinary terms as infirmitas⁴² and morbus⁴³ were also employed. The specific terms found for them were inguen for the bubonic plague;⁴⁴ dysentericus for dysentery;⁴⁵ ignis coelestis for ergotism;⁴⁶ leprae for leprosy;⁴⁷ febres for fevers;⁴⁸ tertianae febres for tertian fever;⁴⁹ quartanaria febris⁵⁰ and quartanus typus⁵¹ for quartan fever; and typus frigoris and frigoriticus⁵² for fever⁵³

35. For examples of the use of this term see Greg., Hist. Franc., IV 32; V, 35; VI, 14; X, 23, 30 and Mir. Mart., III, 18, 34.

36. Fredegarius, Chronicum, XVIII.

37. Greg., Hist. Franc., IV, 31.

38. Salvianus, De Guber. Dei., VII, 19.

39. Ibid., VII, 17.

40. Greg., Mir. Mart., III, 18.

41. Ibid., IV, 46.

42. Ibid., V, 35; IV, 31.

43. Ibid., V, 36.

44. Greg., Hist. Franc., IV, 5; IX, 21.

45. Ibid., V, 35; IX, 13; X, 3, 29, and Mir. Mart., I, 37; II, 12, 51; III, 43; IV, 9.

46. Greg., Hist. Franc., X, 30.

47. Salvian., De Guber. Dei., I, 11; Mir. Mart., II, 58.

48. Greg., Hist. Franc., IV, 16, 32; V, 35; VI, 6, 15; VIII, 39; IX, 13; De Lib. Glor. Confess., XL; Mir. Mart., II, 1, 2, 52; III, 59; IV, 3, 25, 28, 33, 42; Fredegarius, Chronicum, XC; Anonymus, Continuum de Chronicum, XCIII.

49. Greg., Lib. De Glor. Confess., CV; Liber de Passione Virtut. et Gloria S. Julian. Martyr.; and Mir. Mart., IV, 37.

50. Greg., Hist. Franc., IV, 32; Greg., Lib. de Glor. XXIV. Greg., Mir. Mart., II, 58; Greg., Liber De Passione Virtut. et Gloria S. Julian. Martyr. (Patrol. lat., LXXI, 1106)

51. Greg., Hist. Franc., IV, 36; Greg., Mir. Mart., II, 22, 32; III, 50.

52. Greg., Mir. Mart., IV, 21.

53. Greg., Hist. Franc., V, 10; Mir. Mart., IV, 10, 37; and Lib. De Glor. Confess., XXVI.

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beginning with a cold. In regard to non-contagious diseases,⁵ one notes that both Gregory and Walafrid discussed them frequently. For these diseases the specific terms used were energumenus⁵⁴ or inergumenus⁵⁵ for the possession of demons; spiritus malignus for an evil spirit;⁵⁶ spiritus immundus for an unclean spirit,⁵⁷ epilepticum⁵⁸ and cadivium⁵⁹ for epilepsy; fluxus ventris⁶⁰ and immoderatus fluor⁶¹ for diarrhea; paralysis⁶² and debilitas⁶³ for paralysis; caecus,⁶⁴ caecitas⁶⁵ and tenebrosus⁶⁶ for blindness; dolor oculorum,⁶⁷ lippitudo oculorum⁶⁸ and spiculum oculorum⁶⁹ for pain in the eyes; caligo oculorum,⁷⁰ cutis oculis,⁷¹ and cataracta oculorum⁷² for cataract;

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54. Greg., Mir. Mart., II, 20, 37; IV, 6, 14, 24, 38.
 55. Greg., Hist. Franc., IV, 32.
 56. Walafrid., Vit. S. Gall., I, 15.
 57. Ibid., I, 16; Greg., Hist. Franc., VI, 6.
 58. Greg., Hist. Franc., IV, 12; Mir. Mart., II, 18.
 59. Greg., Mir. Mart., II, 18.
 60. Ibid., III, 52.
 61. Walafrid., op. cit., II, 18.
 62. Greg., Mir. Mart., I, 2; II, 21; III, 35, 40; Lib. De. Glor. Confess., CIII; and Walafrid., op. cit., II, 44.
 63. Greg., Mir. Mart., III, 44.
 64. Ibid., I, 8, 39; II, 9, 13, 15, 29, 34, 36, 50, 54, 58; III, 5, 16, 19, 20, 28, 35, 39, 48, 56, 57; IV, 4, 6, 12, 17, 18, 19, 20, 23, 24, 38, 44, 45; Hist. Franc., IV, 32; VI, 9; and Walafrid., op. cit., II, 38.
 65. Greg., Mir. Mart., II, 15; III, 23 and Walafrid., op. cit., II, 22.
 66. Walafrid., op. cit., II, 45.
 67. Ibid., II, 22.
 68. Ibid., I, 34.
 69. Greg., Mir. Mart., II, 19.
 70. Walafrid., op. cit., II, 6.
 71. Ibid., II, 27.
 72. Greg., Hist. Franc., V, 6; Mir. Mart., II, 41.

surdus,⁷³ tinnitum aures,⁷⁴ praeclusione aurium,⁷⁵ and claustrae aures⁷⁶ for deafness; mutus for muteness; dolor ventris,⁷⁸ morbus stomachus,⁷⁹ and fastidius,⁸⁰ for diseases of the stomach; morbus regius calculisque for jaundice and stones;⁸¹ humor chiragrae for gout in the hand,⁸² humor podagrae⁸³ and humor pedum⁸⁴ for gout in the foot; tremor cordis for heart disease;⁸⁵ dolor capitis for headache;⁸⁶ dolor dentis for toothache⁸⁷ and maxilla intumescens for swollen jaw;⁸⁸ dolentia gula for sore throat;⁸⁹ frigor for cold;⁹⁰ pustula,⁹¹ ulcus,⁹² and ulcera⁹³ for minor skin infections; and pedum infectum for infections of the feet.⁹⁴

73.Greg., Mir. Mart., III,17; Hist. Franc., VI,6. Walafrid., op. cit., II,28.

74.Greg., Hist. Franc., VI,6.

75.Walafrid., op. cit., I,34.

76.Ibid., II,6.

77.Greg., Mir. Mart., I,7; II,26,30,38; III,37,54; IV,40. Hist. Franc., VI,6; and Walafrid., op. cit., II,28.

78.Greg., Mir. Mart., IV,1.

79.Ibid., III,30.

80.Walafrid., op. cit., II,33.

81.Greg., Hist. Franc., VI,9.

82.Greg., Mir. Mart., II,3.

83.Greg., Hist. Franc., V,43; X,15 and Lib. De.Glor. Confess., XL.

84.Greg., Mir. Mart., III,13.

85. Ibid., I,26.

86.Ibid., II,60.

87.Walafrid., op. cit. I,34; Greg., Hist. Franc., X,9; and Lib. De Glor. Confess., XCV

88.Greg., Lib. De Glor. Confess., CV.

89.Ibid., XXIV.

90.Loc. Cit.

91.Greg., Mir. Mart., I,13,32 and Marius, Chron., An.571

92.Greg., Lib. De Glor. Confess., XXIV.

93.Walafrid., op. cit., II,39.

94.Greg., Hist. Franc., IV,32.

Of the plagues, probably the most destructive was the bubonic, outbreaks of which seem to have occurred intermittently in southern Gaul from 547 to 591.⁹⁵ A number of the places visited by this pestilence were specifically mentioned by Gregory. Although Auvergne escaped the disease in 552 through the intercession of Saint Gall, it spread through the province of Arles. However, in 571, the plague reached enormous proportions in Auvergne. As Gregory recounted it,

At the coming of the disaster itself, there was made such slaughter of the people through all that region, that the legions of men who fell there might not be numbered. When coffins and planks failed, ten or more dead were buried in a common pit. In the single church of Saint Peter there were counted on a certain Sunday three hundred corpses.⁹⁶

In 581 Queen Austrechild died of this plague;⁹⁷ it raged cruelly at Narbonne in 582;⁹⁸ the inhabitants of Marseilles suffered

⁹⁵. This is a disease transmitted to man by a bite from the bubonic flea from rats. Earlier accounts of the bubonic plague are given in the description of the Athenian plague of 430 B.C. by Thucydides in the second book of his History, p.145 *et seq.*; by Rufus of Ephesus in the second century A.D.; and by Agathias and Procopius in the sixth century A. D. See O. M. Dalton, *The History of the Franks by Gregory of Tours*, I, 421.

⁹⁶. *Hist. Franc.*, IV, 32. "Jam vero adveniente ipsa clade, tanta strages de populo illo facta est per totam regionem illam, ut nec numerari possit quantae ibidem ceciderint legiones. Nam cum jam sarcofagi aut tabulae defecissent, decem aut eo amplius in una humi fossa sepeliebantur. Numerata sunt autem quadam Dominica in una beati Petri basilica trecenta defunctorum corpora...."

⁹⁷. *Greg.*, *Hist. Franc.*, V, 36. "Illis diebus Austrechildis, Guntchramni principis regina, ab hoc morbo consumpta est...."

⁹⁸. *Ibid.*, VI, 14. "Audivimus enim eo anno in Narbonensem urbem inguinarium morbum graviter desaevire, ita ut nullum esset spatium, cum homo correptus fuisset ab eo."

from it in 587 and from here it passed north into the Lyonnais;⁹⁹ again in 588 there was a report of the plague in Burgundy;¹⁰⁰ in 590 in the cities of Avignon and Viviers;¹⁰¹ and in 591 the ill-fated malady seems still to have been rampant in Marseilles.¹⁰²

Gregory stated that "tinder" (fomes) was the cause of the bubonic plague. In relation to the plague at Marseilles in 587, he said,

In the meantime a ship had put into the port with the usual merchandise from Spain, unhappily bringing the tinder which kindled this disease. Many citizens purchased various objects from the cargo, and soon a house inhabited by eight people was left empty, every one of them being carried off by the contagion.¹⁰³

99. Greg., *Hist. Franc.*, IX, 21. "Nam tunc ferebatur Massiliam a lue inguinalia valde vastari, et hunc morbum usque ad Lugdunensem vicum...."

100. Cf. *infra*, p. 10 for discussion of *ibid.*, IX, 21.

101. *Ibid.*, X, 23. "Vivariensum Avennicamque urbem graviter lues inguinalia devastavit."

102. *Ibid.*, X, 25. "At in Gallius Massiliensem Provinciam morbus saepe nominatus invasit...."

103. *Ibid.*, IX, 22. "Interea navis ab Hispania una cum negotio solito ad portum ejus adpulsa est, quae hujus morbi fomitem secum nequiter deferebat: de qua cum multi civium diversa mercarentur, una confestim domus in qua octo animae erant, hoc contagio interfectis habitatoribus, relicta est vacua." From this account there is no evidence to reveal through what medium Gregory thought the malady was acquired. If he considered the problem of transmission - which is unlikely - he does not seem to have believed that the bubonic plague was transmitted from man to man. His association of the plague with the cargo on the ships from Spain is rather remarkable, for probably infected rats were brought into southern Gaul by these ships, and these multiplied rapidly in the conditions of filth and unsanitation found in sixth century Gaul.

Here, it is noteworthy that the idea which one would expect from Gregory- that the bubonic plague came as a result of the wrath of God - does not appear in either this or in the other of his accounts.

Gregory described in some detail the symptoms of the plague in connection with it at Auvergne:

For death came suddenly. There appeared in the groin or armpit a wound like that from a snakebite, and those who had it were swiftly destroyed by the poison; and on the second or third day they breathed their last; the strength of the poison robbed men of their senses.¹⁰⁴

A number of remedies were cited by Gregory for this disastrous plague. One remedy was entirely spiritual. According to one of his accounts, Gall,¹⁰⁵ then in Auvergne, was afraid his people would be destroyed by the fearful epidemic, and hence implored God not to let him see such a catastrophe occur. An angel of God appeared to him, saying that for eight years (the remainder of his life) Auvergne would be spared, and

Then suddenly, as men looked, signs appeared on the walls of houses and churches, which writing was called Tau by the people. However while...that plague consumed other regions, through the intercession of Saint Gall it did not reach Clermont.¹⁰⁶

¹⁰⁴.Hist. Franc., IV,31."....erat enim et ipsa mors subita. Nam nascente in inguine aut in ascella vulnere in modum serpentis, ita inficiebantur homines illi a veneno, ut die altera aut tertia spiritum exhalarent...Sed et sensum vis illa veneni auferebat ab homine." In this passage, Gregory's description of symptoms - although incomplete- is in agreement with those of modern medicine, for doctors today observe that the inguinal and axillary glands are first affected, and that the victim becomes insensate in mind and body. (See William Osler, Principles and Practice of Medicine, p.144)

¹⁰⁵.Gall, an Irishman by birth, was one of the first twelve disciples who accompanied Saint Columbanus(b.543) to Gaul. He was later canonized.

¹⁰⁶.Hist.Franc.,IV,5."Tunc etiam in subita contemplatione parietes vel domorum vel Ecclesiarum signari videbantur. Unde a rusticis haec scriptio Thau vocabatur. Cum autem regiones alias, ut diximus lues illa consumeret, ad civitatem Arvernam, sancti Galli intercedente oratione, non adtigit."

Something of the faith in the miraculous power of the medieval saints may be gleaned from this passage. The incident is also reminiscent of the immunity granted to the Israelites by the sign of the blood.¹⁰⁷ The only purely physical remedy tried was the drinks (potiones) which were given to Queen Austrechild for the bubonic plague by her doctors.¹⁰⁸ Austrechild died, but probably the draughts did not hasten her end, for the bubonic plague was neither a "respector of persons" nor a disease which could be treated effectively.¹⁰⁹ In 588 the good King Gunthram of Burgundy tried both spiritual and physical means to effect a cure for the plague. Thus,

...he commanded every one to assemble in the great church and Rogations to be celebrated with the utmost devotion; nothing was to be taken by way of nourishment but barley bread and pure water; all were to be constant in keeping the vigils.¹¹⁰

Oil from the sacred basilica of Saint Martin was used successfully as a curative agent for cattle afflicted by the disease.¹¹¹

107. Exodus, XII,7

108. Hist. Franc., V,36.

109. Even today the only measures recommended by doctors for the plague are prophylactic, such as improvement of conditions of sanitation.

110. Hist. Franc., IX,21. "...jussit omnem populum ad Ecclesiam convenire, et Rogationes summa cum devotione celebrari: et nihil aliud in usu vescendi, nisi panem hordeaceum cum aqua munda adsumi, vigiliisque adesse instanter omnes jubet..." Gunthram's suggested diet of carbohydrate would be beneficial for any person who had fever, for with the least effort the patient could acquire energy for body maintenance. However, Gunthram was primarily considering the religious significance of a quasi-fasting diet.

111. Mir. Mart., III,18. This treatment could have no efficacy.

Dysentery seems to have approximated the bubonic plague in its fatal effect. According to Gregory, there was an epidemic of the disease in 572 at Tours;¹¹² in 580 throughout all Gaul;¹¹³ in 587 at Metz;¹¹⁴ in 590 among the Frankish soldiers invading Italy;¹¹⁵ and in 591 again at Tours.¹¹⁶ In truly medieval fashion Gregory described the portents which preceded the catastrophic plague of dysentery in 580 throughout all Gaul- there were terrific rains, lightning, an earthquake at Bordeaux, and a fire at Orleans.¹¹⁷

In regard to the cause of dysentery, Gregory gave a popular and a personal explanation. He said that "many declared the sickness was caused by a secret poison,"¹¹⁸ but that "the peasants described the cause as pustules around the heart."¹¹⁹

112. Cf. *infra*, p. 12 for discussion of *Mir. Mart.*, II, 1.

113. Cf. *infra*, p. 13 for discussion of *Hist. Franc.*, V, 35.

114. *Ibid.*, IX, 13. "Graviter tunc morbus dysentericus apud Mettensem saeviebat civem urbem..."

115. Cf. *infra*, p. 12, for discussion of *Ibid.*, X, 3.

116. *Mir. Mart.*, II, 51.

117. *Hist. Franc.*, V, 34. "...Arvernorum regionem diluvia magna presserunt...In Turonico...fulgor per coelum cucurrisse visus est...Ipso graviter urbs Burdegaliensis a terrae motu concussa est...Nam et Aurelianensis civitas gravi incendio conflagravit..."

118. *Hist. Franc.*, V, 35. "...a multis autem adserubatur venenum occultum esse."

119. *Hist. Franc.*, V, 35. "Rusticiores vero corales hoc pusulas nominabant..." It is possible to explain this concept of the peasants on the basis of known medical facts. If amoebic dysentery perforation into the right lung is frequent, if an abscess has formed in the liver; and the peasants might have attributed a pain in the lung to sores around the heart.

In another passage, he stated his own opinion that the disease was caused by climate, saying that dysentery ravaged the Frankish army invading Italy in 590 because "the air was different from that which these people were accustomed."¹²⁰

Gregory's accounts of the symptoms of amoebic dysentery are significant. In describing his own suffering from the disease in 572 at Tours, he said,

I had dysentery with high fever. As I began to feel ill, I despaired to live, for death seemed imminent for all those attacked. My digestion stopped... Food was distasteful to me, and the power to abstain from food was not needed on account of the fever of my body. Indeed food was not even tempting. A severe pain penetrated all my abdomen and descended to my groin which tormented me as much as the fever.¹²¹

^{120.}Hist. Franc., X, 3. "Morbus etiam dysenteriae graviter exercitum adficiebat, eo quod aeres incongrui insuetique illis hominibus essent, ex quo plerique interierunt." Again the medieval explanation is rational, for today it is recognized that dysenteric affections are more frequent in malarial sections. Yet Gregory failed to notice war as a causal factor in dysentery. In both the epidemic of 590 in Italy and that of 580 throughout all Gaul it is significant that the plague spread during a period of wars, for at a time when food was prepared for so large a number, a cook who was a carrier of amoebic dysentery could spread the disease widely. In addition to the consideration of food, the exigencies of war would force soldiers to drink water, the purity of which could not be assured. Although the sources of infection for amoebic dysentery are not known definitely today, it seems probable that one of them is drinking water and another food.

^{121.}Mir. Mart. II, 1. "Anno 572...incurri dysenteriam cum feber valida, et taliter agi coepi, ut imminente morte vivere omnimodis desperarem. Emittebam autem assidue digestionum officia... et erat horror cibi; cumque ab inedia deficeret virtus stomachi, febris tantum erat victus corpori. Nam nullatenus accedebat confortatio sumptuosa; erat autem et dolor gravis totam alvum penetrans, et descendens ad ilia, non me minus consumens tortura sua quam febris exegerat." Gregory's reaction to food is typical of amoebic dysentery. His high fever seems exaggerated for very high fever is not characteristic of the disease. However, his measurements were necessarily based on guesswork. Today it is known that abdominal pains and tenesmus (straining of the bowels) are often present in the outset of severe cases of dysentery.

In the same passage Gregory referred to a man who suffered from dysentery with "hidden sores" (*occultis pustulis*).¹²² He also related the symptoms of those attacked by dysentery in the widespread epidemic of 580; "the sick suffered from severe fever¹²³ with vomiting,¹²⁴ exceeding pains of the kidneys,¹²⁵ and a heaviness of head and neck;¹²⁶ what they passed at the draught was of a yellow or greenish color..."¹²⁷ In another instance Gregory told the symptoms "of a woman who suffered from dysentery for five months. Food gave her no comfort for she had lost the power of digestion."¹²⁸

122. *Mir. Mart.*, II, 1. "cum autem morbus ille dysentericus cum *occultis pustulis* multas attereret civitates..." These "hidden sores" may refer to ulcers for the lesions (wounds) of amoebic dysentery consist of ulcerations in the large intestine.

123. In this passage the same unavoidable inaccuracy is found in Gregory's account of high fever as in his description of his own attack of the disease.

124. The reference to vomiting might be questioned, for vomiting and nausea are only occasionally found in amoebic dysentery. However, if this remedy of herbs which Gregory mentioned in the same account contained opium (a treatment now often used to relieve pain and quiet peristalsis), nausea would often follow.

125. Abscess of the liver is a frequent complication of amoebic dysentery; and, knowing very little of anatomy, it would be easy for Gregory to confuse a pain in the liver with one in the kidney.

126. The characteristic muscular weakness of the disease would be apt to make the head and neck seem heavy.

127. *Hist. Franc.*, V, 35. "Erat enim his qui patiebantur, valida cum vomitu febris, renumque nimius dolor, caput grave vel cervix. Ea vero quae ex ore projiciebantur, colere croceo, aut certe viridia erant..."

128. *Mir. Mart.*, I, 37. "Nam vidi mulierem a dysenteria per quinque menses graviter laborantem... confortationem cibi, et virtutem corpusculi superflue digerendo perdiderat." Undoubtedly this woman was a victim of chronic dysentery which may, or may not have followed an acute case of the amoebic form. In chronic dysentery the appetite is capricious and the digestion upset.

A number of remedies for amoebic dysentery were cited by Gregory. According to his accounts, he himself¹²⁹ and the woman who suffered from chronic dysentery¹³⁰ were cured by the sacred drink formed of wine and ashes.¹³¹ The man who suffered from dysentery with hidden sores was cured at the sepulchre of Saint Martin by the wine and oil¹³² habitually kept there.¹³³ In his narration of the epidemic of 580, Gregory said, "...when the people placed a cupping glass on the shoulders of the legs and the cover was raised, blood was left there. This treatment of bleeding saved many.¹³⁴ Many found a safeguard in drinking a decoction of the herbs¹³⁵ which were antidotes to poisons."¹³⁶

129. Mir. Mart., II, 1.

130. Ibid., I, 37.

131. Greg., Lib. De Glor. Confess., XXIV and Mir. Mart., II, 12; III, 43; IV, 9, illustrate other examples of persons who were relieved from dysentery by a drink of wine and ashes from the sepulchre of Saint Martin. Today wine is used to check diarrhea and ease pain.

132. Oil, if injected into the intestines, could soothe the ulcerated surface.

133. Mir. Mart., II, 1.

134. Bleeding could be of no value for dysentery; however, in uncomplicated cases, the patient recovers in from six to twelve weeks, and Gregory might have attributed natural recovery to bleeding.

135. Not knowing the constituents of the herb drink, it is impossible to determine its relative efficacy. As has been mentioned, opium could have been beneficial. Broths make an excellent diet for a victim of dysentery; in fact any sort of liquid diet would be preferable to a solid.

136. Hist. Franc., V, 35. "...quia missae in scapulis sive cruribus ventosae, procedentibus erumpentibusque vesicis, decursa sanie multi liberabantur; sed et herbae, quae venenis medentur, potui sumtae, plerisque praesidia contulerunt."

In relation to the epidemic from which the Frankish army invading Italy in 590 suffered, Gregory commented that "the wind and rain came unexpectedly and the air became fresh and brought relief."¹³⁷ Probably the wind would have had a stimulating effect on those who were recovering from uncomplicated cases of dysentery, and the rain would tend to purify the stagnant drinking water.

One of the most interesting of the epidemic diseases was ergotism; it was often confused with erysipelas, gangrene and the bubonic plague by medieval chroniclers. This disease resulted from eating stale rye bread, the common bread staple of the lower classes during the Middle Ages.¹³⁸ According to Garrison, the first reference to ergotism is found in the Annals of the convent of Xantem of 857.¹³⁹ However, Gregory referred to a plague in the sixth century, the symptoms and terminology of which indicate that it was probably the dread ergotism or Saint Anthony's fire.¹⁴⁰ According to him, "In the year 582 there were

137. Hist. Franc., X, 3. "Commoto autem vento et data pluvia cum paulisper refrigescere aer coepit, in infirmitate salubritatem contulit."

138. Its agent was the fungus, claviceps purpurea which forms in spur-shaped masses upon rye.

139. Fielding H. Garrison, History of Medicine, p. 187.

140. The name of Saint Anthony's Fire was first used by the French historian Mezeray in speaking of the epidemic of ergotism in 1090. The order of Saint Anthony for the care of the sufferers from this disease was founded in 1093. Cf. Garrison, op. cit., p. 187, note 2.

many maladies which were dangerous to the bladder and characterized by blisters."¹⁴¹ This "danger to the bladder" might easily have been the gangrene which affected any part of the body of persons attacked with ergotism. The use of the term pusula for blister, by Gregory, in this passage, is also significant, for Bouquet¹⁴² and Andrews¹⁴³ define pusula as the characteristic irruptions of Saint Anthony's fire or the sacred fire (sacer ignis). Both of these scholars differentiate between pusula and pustula, pusula being the sores of Anthony's fire and pustula being a sore of any type.¹⁴⁴ DuCange gives pusula as a definition for pustula.¹⁴⁵ It is probable, as Bouquet has pointed out,¹⁴⁶ that copyists or editors have used the two terms interchangeably. In describing the condition of Felix, bishop of Nantes, in the same year, Gregory said, "However, as the fever departed, pustules came out upon his legs as a result of malignant humours. He applied too strong a plaster of cantharides and his legs became

141. Hist. Franc., VI, 14. "Magna igitur eo anno lues in populo fuit: valitudines variae malignae, cum pusulis et vesicis..."

142. M. Bouquet, Recueil historiens des Gaules et de la France, II, 238, note G.

143. E.A. Andrews, Latin-English Lexicon, p. 1242.

144. Loc. cit. for Bouquet and Andrews.

145. C.D. DuCange, Glossarium mediae et infimae latinitatis, vol. V.

146. Bouquet, op. cit., II, 238, note G.

gangrenous. So he ended his days..."¹⁴⁷ Noteworthy is the statement in this passage that the "fever departed", for ergotism usually began with sensations of extreme coldness in the affected part, and the feeling of coldness might give the medievalists the impression that the fever was leaving. The blisters on the leg followed by gangrene described accurately the development of the disease.

In one passage Gregory referred to "celestial fever", (ignis coelestis): "In the city of Limoges, many people were consumed by a celestial fever because without regard for the day sacred to God they were engaged in public work..."¹⁴⁸ In this instance, there is only the term, ignis coelestis, to indicate that this disease was ergotism. The spiritual etiology of the malady may be noted in the term and in the account itself.

Gregory mentioned a number of remedies for those afflicted with pusulae. In relation to the plague of 582, he said that "many died from the disease, but with care many recovered."¹⁴⁹ Since the chronicler did not cite any specific therapeutic in this

147. Hist. Franc., VI,15. "Sed postquam febris discessit, tibiae ejus ab humore pusulas emisierunt. Tunc cantharidarum cataplasman nimium validam ponens, computrescentibus tibiis... vitam finivit..."

148. Ibid., X,30. "Apud Lemovicinam vero urbem ob Domini diei injuriam pro eo operam publicam exercerent, plerique igne coelesti consumti sunt."

149. Ibid., VI,14. "...quae multum populum adfecerunt morte. Multi tamen adhibentes studium, evaserunt."

passage, one concludes that the patients recovered by such simple treatments as rest and sunshine. The poultice of cantharides used by Felix, bishop of Nantes, has been mentioned.¹⁵⁰ Gregory further related a remedy employed by a certain Saint Morigund for sores (pusulae) or ulcers (ulci):

If anyone had a bad sore and came prayerfully to Saint Morigund, she healed it by praying and smearing with saliva a mixture of vegetables and fruit leaves on the sore.¹⁵¹ She made a cross above the leaves which she placed on the sore. Immediately the poison disappeared.¹⁵² An extremely ill person preferred nothing more than this remedy.¹⁵³

In this passage both pusula and ulcus were used to describe the sore which healed. According to Andrews, ulcus may refer to any type of sore.¹⁵⁴ The only definite indication that this disease

150. Cf. supra, p. 16 for discussion of Hist. Franc., VI, 15.

151. Did the saliva and the herb concoction aid recovery? The saliva would tend to infect sores. Some herb mixtures, or drugs, would act as an antiseptic, and hence, prevent infection and assist nature in healing. However, in this instance, it is impossible to determine the efficacy of the herb combination because Gregory did not disclose what materials were used.

152. What does the fact that the blisters disappeared indicate? If the malady was ergotism and the patient recovered - as many did - blisters would have disappeared during the course of the disease. Yet many other forms of eruptions could have disappeared in a similar manner. Since Gregory said that "extremely ill patients" preferred this herb treatment to all others, the persons coming to Saint Morigund must have been afflicted with a more serious malady than simple sores.

153. Greg., Lib. Glor. Confess., XXIV. "Nam si quis pusulam malam incurrisset, et ad eam veniens orationem predabatur; confestimque illa prosternebatur ad supplicandum Dominum, et colligens folia cujuslibet oleris autem pomo, saliva illiniebatm faciensque crucem super ulcus imponebat folium: confestimque ita omne venenum evanescebat, ut nihil dignum leti aegrotus ultra perferret."

154. Andrews, op. cit., p. 1584.

was ergotism is the term pusula; from the other evidence, the sores may have been due to ergotism, erysipelas or leprosy. In another passage, Gregory said that poisons from bad sores (pusulae) were pressed out by the sign of the cross.¹⁵⁵ Again the term pusula is the only indication of ergotism.

Another of the contagious diseases was leprosy (leprae);¹⁵⁶ this was a malady already known to the ancient Hebrews, Greeks and Romans, which appeared in northern Europe in the sixth and seventh centuries.¹⁵⁷ Dalton suggests that lepers were common in many parts of Merovingian Gaul.¹⁵⁸ Two contemporary writers hinted at the current concept of the cause of leprosy. Salvian, in the fifth century, said it was unsuitable that the high priest Aaron be deformed with leprosy.¹⁵⁹ The idea that the body of the pious was sacred, the "temple of God", justified the belief that the truly virtuous could not be thus afflicted. In the sixth century, Gregory said that the children of voluptuous parents were apt to be lepers.¹⁶⁰

155. Hist. Franc., VI, 8. "...pusularum malarum venenum crucis signo saepe compressit..."

156. Salvian, De Guber. Dei, I, 11; Greg., Mir. Mart., II, 58.

157. Garrison, op. cit., p. 170.

158. Dalton, Greg. of Tours Hist. of the Franks, I, 422.

159. Salvian, op. cit., I, 11. "...sed etiam Aaronem humiliaverit, qui, etsi deformari lepra summum antistitem non oportuit..."

160. Mir. Mart., II, 24. "Satis est aliis diebus voluptati...Quia qui in ea conjuges simul convenerint, exinde aut contracti, aut...leprosi filii nascuntur."

Gregory's description of the symptoms of leprosy warrant notice. He said "that the leper's blood boiled ¹⁶¹ as one with quartan ague; that his body was covered with small sores¹⁶²; that he had pain in all his limbs; and that the light of his eyes disappeared."¹⁶³

The Merovingian sources furnish little information on the treatment for leprosy. The leper described by Gregory was cured at the basilica of Saint Martin through prayer.¹⁶⁴ A temporary relief for anesthetic leprosy through such a powerful psychological stimulus as prayer would be possible. Gregory may have recognized the comparative incurability of the disease since he mentioned only one miraculous cure of it in his Miracles of Saint Martin (De Miraculis Sancti Martini), whereas he frequently referred to supernatural cures for other diseases. There was legislation to enforce the isolation of lepers during this period. According to Sudhoff, at the Council of Orleans in 549, lepers were ordered off the streets and forbidden free communication

161. Although high fever is not characteristic of leprosy, it is possible that Gregory thought the excessive sensibility of the skin was due to a boiling humor.

162. It is also probable that the macular (sores not elevated above the surface of the skin) eruptions of leprosy would seem small to Gregory in contrast with those which rise angrily above the skin level.

163. Mir. Mart., II, 58. "...id est decocti sanguinis fece, quartanarius efficitur, atque effervescente humore, ita omne corpus ejus minutis pustulis coarctabatur, ut a quibusdam leprosus putaretur. Sed et per omnia membra dolores pessimos sustinebat, amborum oculorum luce muletatus."

164. Loc.cit. This form is chronic and may persist for years without much deformity. Cf. Osler, op. cit., p. 280.

with the crowds of people wandering through the country. They were also required, by the acts of this council, to wear a peculiar dress.¹⁶⁵ In one of the sources there is a reference to the fact that at the Council in 583 bishops were charged to provide lepers of their diocese with food and raiment, that they might not be allowed to wander abroad and spread the taint of their disease.¹⁶⁶

Fevers, (febris) were widespread. One meets with considerable more difficulty in grouping the innumerable fevers mentioned by Gregory than in the other specific diseases for the descriptions are so brief that they defy diagnosis. It is probable that the fevers of a certain Chramme and of a man from Angers belong in the same category. In regard to Chramme, Gregory wrote: "Chramme...wrought divers ill deeds at Clermont, holding to his grudge against Bishop Cautinus. At this time he was sickened so sore that his hair fell from him through his exceeding fever."¹⁶⁷ In this passage one finds the idea of

165. Karl Sudhoff, "Aus der Geschichte des Krankenhauswesens im fruheren Mittelalter in Morgenland und Abendland, Archiv für Geschichte der Medizin, XXIX, (1929) 200. Possibly there was a Merovingian ordinance forbidding marriage for lepers. Jeanselm ("Comment l'Europe au Moyen Age se protegea contre la lepre", Bulletin Société Française Historique Médecine, XXV, 1) said that the sister of Dagobert (629-639) prayed God for leprosy to avoid marriage. The same writer said that lepers were cared for in villages.

166. J.D.Mansi, Sacrorum Concilliorum nova et amplissima Collectio, IX, 943. This work was not available for consultation; the material was obtained from S.Dill, Roman Society in Merovingian Gaul, p. 256.

167. Hist. Franc., IV, 16. "Chramnus vero apud Arvernens diversa...exercebat mala, semper adversus Cautinum Episcopum invidiam tenens. Eo tempore graviter aegrotavit, ita ut capilli ejus a nimia febre deciderent." The malady might have been typhoid or any high fever.

divine punishment as the causal factor in acquiring favor. In reference to the man from Angers, the same chronicler said, "...there was an inhabitant of Angers who through exceeding fever had lost his speech and hearing; and on his recovery from the fever he remained deaf and dumb."¹⁶⁸

Another of the current fevers was a fever which began with a cold (frigoriticus)¹⁶⁹ or typus frigoris.¹⁷⁰ According to Gregory, "there were indeed in the territory of Bourges... feverish patients with colds."¹⁷¹ The symptoms of cold and fever described in this passage resemble our modern plague of influenza. The anonymous writer of the Life of Saint Severin (Vita Sancti Severini) said that, "It was at this time that Clovis, king of the Franks...¹⁷² suffered from a grave illness, a fever and a cold which lasted for two years..."¹⁷³ The long duration of the fever and cold of Clovis seem to indicate that he had tuberculosis.

168. Hist. Franc., VI, 6. ". haec homo erat Andegavensis incola, qui per nimiam febrem eloquium pariter auditumque perdidit; et cum de febre convalesceret, surdus permanebat ac mutus. ..." Typhoid or any severe infection might cause fever followed by temporary deafness and laryngitis (inflammation of the larynx).

169. Cf. supra, p. 4, note 53.

170. Cf. supra, p. 4, note 52.

171. Hist. Franc., V, 10. "Fuit autem in Biturico termino...frigoriticis laborantibus..."

172. King Clovis (481-511) was founder of the Frankish kingdom in Gaul.

173. Anon., Vita Sancti Severini, c. 1. "Eodem tempore cum Chlodoveus rex Francorum...tunc in corpore suo gravis obvenit infirmitas, typus frigoris per duos annos..."

Gregory also said that Queen Austrechild suffered from this type of fever.¹⁷⁴

Gregory's description of the symptoms of another of the febres is significant:

There was a man who had high fever and ejected poison from his mouth...When he attempted to rise he felt a pain from his groin to the sole of his feet. Soon he experienced anguish through his side and arm to his neck. Pain progressed from his other side to the sole of his feet...¹⁷⁵

In this passage, the symptoms described resemble dengue, a contagious fever characterized by intense shifting pains in the joints, muscles and bones and by black vomit.

Tertian fever, (tertianae febres)¹⁷⁶ was mentioned by Gregory.¹⁷⁷ He described "a man who suffered from a severe case of tertian fever accompanied by trembling."¹⁷⁸

174. Mir. Mart., IV, 37.

175. Ibid., II, 52. "Alter quoque arreptus a febre valida, dejiciens ore venenum...laboranti oritur vulnus in inguine, et incredibili modo movet se visibiliter usque ad plantam. Erat enim in magnitudine ovi anserini. Deinde sursum repetens, cum nimio dolore discurrit per latera, per brachia, et usque ad cervicem progreditur: deinde per aliud latus ad plantam usque deducitur..."

176. Cf. supra, p.4, note 49.

177. Tertian fever is one of the malarial fevers of which the paroxysms occur at the time at which the spores develop on the tertian parasite - that is at regular intervals of about forty-eight hours, every third day (hence the term, tertian). These fevers are prevalent in low, marshy regions which have a heavy vegetable growth and are, therefore, favorable to the development of the parasite with which the victim becomes infected. There were many such uncultivated lands in Merovingian Gaul.

178. Lib. De Glor. Confess., CV. "...quidam, quem ardor tertianae febris cum gravi tremore vexabat..." The trembling symptom in the medieval version is correct for, in the first stage of this fever, the patient begins to shiver, and the teeth chatter; the movements may be so violent as to shake the bed.

Gregory also referred to quartan fever (quartanaria febris¹⁷⁹ or quartanus typus)¹⁸⁰. He disclosed his concept of the cause of this fever in his account of the case of Bishop Priscus of Tours: "However, the divine Majesty was at length roused, and took vengeance on the house of Bishop Priscus...The bishop himself was attacked by a quartan fever..."¹⁸¹ In another passage the same chronicler described a girl who "because of vice suffered from the quartan ague."¹⁸² Thus, sin and the wrath of God were the supposed causes of quartan fever. In completing his discussion of Bishop Priscus and his family, Gregory revealed their symptoms: "The bishop...was seized with tremors. Even when the fever had left him, he still remained dazed and trembling. His son and his whole household were blanched and dull of aspect..."¹⁸³

179. Cf. supra, p.4, note 50.

180. Cf. supra, p.4, note 51.

181. Hist. Franc., IV,36. "...sed pro his commota tandem divina Majestas ulta est in familia Prisci Episcopi...Episcopus ille a typo quartanae correptus..."

182. Mir. Mart., II,22. "...ut quadam vice una puellarum suarum male a quartani typi febre quateretur."

183. Hist. Franc., IV,36. "...correptus tremorum incurrit. Nam cum typus ille recessisset, hic semper tremens habetur ac stupidus: filius quoque, omnisque familia decolor esse videbatur ac stupida. The trembling described in connection with tertian fever is also typical of the quartan type. The continued trembling of Bishop Priscus was probably due to nervousness. His family's condition can be explained because, if the bishop was exposed to the quartan parasite, it is likely that his family would also be open to such an attack; the sleepiness which follows any fever could make them seem dull and dazed.

In another instance he related more of the symptoms of quartan fever: "As his fever increased, a presbyter of Tours who was vexed with quartan fever was unable either to eat or drink." 184

The fever of an adolescent boy probably should be placed in the malarial group. Gregory described the fever of this boy:

A certain adolescent from our monastery had fever from the eighth hour of one day to the second hour of the next. Nothing gave him relief from the fever. Not only was food repugnant to him, but also nothing eased him. The pain passed through all his limbs and his knees became pale. 185

The remittent character of the boy's fever indicates that it was probably one of the malarial fevers.

Six remedies for fevers were mentioned in our narrative sources; of these five were cited by Gregory. The most popular of Gregory's remedies seems to have been the sacred drink. 186 The same chronicler described the effective remedy used by Hospitius 187 for a man from Angers who had lost his speech and hearing as a result of fever:

184. Mir. Mart., III, 50. "...urbis presbyter quodam tempore graviter a quartano typo vexabatur, ita ut accedent febre, neque cibum, neque potum sumere posset."

185. Ibid., III, 59. "Adolescens quidam ex nostris, nocturnis febribus exabatur in tantum, ut ab hora diei octava usque in crastinum secunda diei hora, nullam aestuandi quietem posset accipere. Erat enim ei et horribilis omnis cibus, nec quidquam unde confortaretur, accipiebat. Dolor etiam saevus membra omnia quatiebat, sed et pallor genas obsederat..."

186. Cf. Mir. Mart., IV, 25, 28, 33, 37, 42. If wine was used as the liquid in the mixture, the drink would act as a sedative, temporarily relieving the patient and making him want to get well. Nature would effect a cure.

187. Hospitius was a recluse who, according to tradition, was born in Egypt toward the beginning of the sixth century; he died at San-Sospis, near Villefranche, France on May 21, 581. He was canonized.

...he grasped his hair with one hand and drew his head into the window (of his cell); there, holding the sick man's tongue with his left hand, he took consecrated oil, and poured it into his mouth and on top of his head, saying: 'In the name of my Lord Jesus Christ, be thine ears unsealed, and thy mouth opened by that power which cast out the evil spirit from him that was deaf and dumb.' With these words he asked of him his name. He answered: 'I am called So- and so.'¹⁸⁸

The use of this formula for the removal of demons by Hospitius is interesting; it is typical of the methods used by pious medieval folk. The other successful remedies which Gregory described were: an infusion of herb sage (salvia) from the crypt of two local saints, Ferreolus and Ferrucius;¹⁸⁹ and a drink of which the fringe from the garment of good King Gunthram was the important constituent. The account of this latter drink remedy warrants quotation:

188. Hist. Franc., VI,6. "At ille adprenta manu caesarie, adtraxit caput illius in fenestram, adsumtoque oleo benedictione sanctificato, tenens manu sinistra linguam ejus, ori verticique capitis infudit, dicens: In nomine Domini mei Jesu Christi aperiantur aures tuae, reseretque os tuum virtus illa, quae quondam ab homine surdo et muto noxium ejecit daemonium. Et haec dicens, interrogat nomen. Ille vero clara voce ait: Sic dicor." If this man treated by Hospitius had laryngitis, the oil could have been beneficial; however, Hospitius was concerned only with the fact that the oil was consecrated.

189. Liber De Gloria Beatorum Martyrum, LXXI. "Ferreolus atque Ferrucio sunt sepulti...extensa dexteræ manus palma, folium herbae salviae...folium dilutum aqua viro porrexit ad bibendum. Qui ut hausit plenus fide, protinus sanitatem plenissimam meruit obtinere." Herb sage is used today to add to the power of aromatic sulphuric acid for hectic fever (fever characterized by sweats). Cf. Alfred Stille and John M. Maisch, The National Dispensatory, p.1251.

It was told by the faithful that a certain woman, whose son was sick of a quartan ague and lay uneasily upon his bed, came up through the crowd immediately behind the king, and tore off by stealth some particles of the fringe upon his royal mantle; immediately the fever was quenched, and he was made whole.¹⁹⁰

In the Life of Saint Severin (Vita Sancti Severini) there is a description of a remedy used for the fever and cold of Clovis which states the inability of the court physician, Tranquillinus, to relieve the king. Finally, according to the account, Tranquillinus insisted that Clovis summon Abbot Severinus from the monastery of Saint Maurice. When he arrived the good abbot prayed and then he wrapped his chasuble (casubula) around the ruler. When this was done, the fever disappeared.¹⁹¹

190. Hist. Franc., IX, 21. "Nam celebre tunc a fidelibus ferebatur, quod mulier quaedam, cujus filius quartano typo gravabatur, et in strato anxius decubabat, accessit inter turbas populi usque ad tergum Regis, abruptisque clam regalis indumenti fimbriis in aquam posuit, filloque bibendum dedit: statimque restincta febre sanatus est..." Other examples of supposed miraculous cures for quartan fever are found in Greg., Lib. de Vita S. Jul. and Lib. de Glor. Confess., XXIV.

191. Anon., Vit. Sever. C. I. "Erat autem ibidem homo in domo regis nomine Tranquillinus doctor et omni sapientia plenus honores arte medicinae gerebat. Hic locutus ad regem dicens: 'Domine mi rex, et quia nullus ex nobis corporis tuo potest invenire medicinam, tibi dico: Audi consilium meum et ad sanctum monasterium Agaunensium, ubi sanctus ac beatissimus Mauricius martyr iacet in corpore, festinanter accede aut certe tuam trans mitte legationem... sanctus autem Dei Severinus suis orationibus ad pristinam eos revocat medicinam... c. VI. Et cum se elavasset, exuens, casubulam suam, corpori regis induit eam, et statim dimisit eum febris.' A relief from a paroxysm of fever might have occurred at the time when the good abbot wrapped his chasuble around the king.

Gregory referred to a plague at Tours and Nantes in 591 of another type: "Indeed as soon as the patient had a light headache, the illness took his life. The people made prayers with great abstinence and much fasting; they also added to the alms to appease the divine anger."¹⁹² From this passage, it is clear that the cause of this plague was deemed to be the wrath of God. The symptoms described resemble meningitis. The same chronicler also mentioned a certain Paternianus who was affected by a contagion (contagium): "A man named Paternianus came from Brittany; he was blind, mute and deaf, his hands were contracted and he was paralyzed in all his limbs on account of a certain contagion."¹⁹³ Paternianus was probably also a victim of some form of meningitis. He was cured miraculously through the virtue of Saint Martin.¹⁹⁴

192. Hist. Franc., X, 30. "Hoc anno mense secundo tam in Turonico quam in Namnetico gravis populum lues attrivit, ita ut modico quisquis aegrotus capitis dolore pulsatus, animam funderet. Sed factis rogationibus cum grandi abstinence et jejuniis, sociatis etiam eleemosynis, adversus divini furoris impetus mitigatus est..."

193. Mir. Mart., IV, 46. "Advenerat quidam ex Brittania, nomine Paternianus qui caecus, mutus, ac surdus, et manibus contractus per quoddam contagium fuerat, et confectis omnibus membris a morbo..."

194. Loc. cit.

The same Chronicler described another plague at

Tours:

In this year the health of the people of Tours was undermined by severe plague. The disease was characterized by languor, high fever, running kidneys and small sores... in this sickness the art of medicine was of no value, unless it was supplemented by divine aid...the victims cleansed themselves with the sacred water from the tomb of Saint Martin and recovered their health."¹⁹⁵

It is interesting to note that only a spiritual remedy was employed for this plague, the symptoms of which are too brief for classification.¹⁹⁶

Gregory recounted the story of a eunuch who suffered from a disease in the thigh (infirmaretur in femore) as a little boy.

...Roëvalis, the chief physician, came forward and made the following statement: 'When this man was a little boy, he had a disease of the thigh, and he was regarded as incurable. His mother went to the holy Radegund, and begged her to have the case examined. The saint summoned me and bade me give all the help in my power. I then cut out his testicles, an operation which in former days I had seen performed by surgeons at Constantinople, and so restored the boy in good health to his anxious mother.'¹⁹⁷

195. Mir. Mart., III, 34. ".quoque anno gravissime populus Turonorum a lue valetudinaria vastabatur. Erat enim talis languor, ut apprenensus homo a febre valida, totus vesicis ac minutis pustulis scateret...in qua aegritudine nihil medicorum poterat ars valere, nisi cum dominicum adfuisset auxilium...ipsa exinde potum sumpsit...sanata est."

196. It is possible that this plague was small pox or gonorrheal infection. However, no matter what the plague was, the spiritual water treatment could be of no possible medical value.

197. Hist. Franc., X, 15. "Interea cum haec nomen pueri eunuchi protulisset, adfuit Roëvalis archiater, dicens: Puer iste parvulus cum esset et infirmaretur in femore, desperatus coepit haberi; mater quoque ejus sanctam Radegundem adivit, ut ei aliquod studium juberet impendi. At illa, me vocato, jussit ut si possim aliquid, adjuvarem. Tunc ego, sicut quondam apud urbem Constantinopolitanam medicos agere conspexeram, incisis testiculis puerum sanum genitrici moestae restitui."

It is possible that this eunuch had tuberculosis or a gonorrheal infection. If he had tuberculosis, surgery would be the best mode of treatment; such an operation would be comparatively simple, involving only lancing the abscess which had formed in the testicles. It is interesting to compare this evidence with Haggard's statement that "during the early part of the Middle Ages there were no trained surgeons in Europe."¹⁹⁸

Varied were the non-contagious maladies which afflicted the inhabitants of Merovingian Gaul. The works of Gregory and the Life of Saint Gall (Vita Sancti Galli) of Walafrid are the most important sources for these diseases, although Salvian's treatise On the Government of God (De Gubernatione Dei) contains some valuable information.

Gregory and Walafrid referred to a number of cases of what seems to have been mental instability. Of these the most frequently mentioned were those unfortunate creatures whom Gregory described by the adjective energumenus¹⁹⁹ or inergumenus²⁰⁰ that is, they were possessed with demons. The current idea seems to have been that any type of insanity was caused by the presence of a demon (daemonium).²⁰¹ In one passage Gregory referred to

198. H.W. Haggard, Devils, Drugs, and Doctors, p.31.

199. Greg., Mir. Mart., I,28; II,20,37; IV,6,14,24,38.

200. Greg., Hist. Franc., IV,32.

201. In Mir. Mart., II,18. Gregory said that a demon was present in epilepsy. For other references to demons see Hist. Franc., VI,6 and Lib. De Glor. Confess., IX and X.

demon of the night (daemonium lunaticum)²⁰² Walafrið called a demon an evil spirit (spiritus malignus);²⁰³ and both Gregory and Walafrið mentioned an unclean spirit (spiritus immundus)²⁰⁴ Another cause was mentioned by Gregory for epilepsy: "The voluptuous think it enough to do the Lord's work on other days [than the feast days]. Indeed such sinful ones are forbidden on this day to worship God again. The children born of these parents are epileptics" ²⁰⁵

The remedies for those possessed were spiritual. An illustration will serve as a type of Gregory's descriptions of treatments for demons:

In those days there came to the basilica of the blessed saint many possessed with daemons. One of these threw himself before the sepulchre and confessed his sins. As he lay on the ground, corrupted blood began to come from his mouth into a recently acquired vessel. After lying there for almost two hours, he was so purified and strengthened that he was able to expell the demon. ²⁰⁶

202. Mir. Mart., II, 18.

203. Vita S. Gall., II, 15.

204. Ibid., I, 16; Greg., Hist. Franc., VI, 6.

205. Mir. Mart., II, 24. "Satis est aliis diebus voluptati operam dare; hanc autem diem in laudibus Dei impolluti deducite. Quia in ea conjuges simul convenerint, eixinde aut contracti, aut epileptici..."

206. Ibid., II, 37. "His etenim diebus ad beati Viri basilicam quidam ex energumenis, cum multos se cruciatus daemonum perferre declamaret, et vi se ejici de acquisito vasculo per beatum Antistiem fateretur, dejectus in terram sanguinem fetidum per os coepit ejicere. Qui duarum fere horarum spatio jacens, expulso daemone, purgatus ac erectus est." The man described in this passage might have had hysteria or melancholia, and, hence, could have benefited from such religious expression as confessing his sins.

In this account Gregory not only mentioned a physiological element in the miraculous cure, but he also seems to imply a relation between the demon and the corrupted blood. He probably believed that purification followed bleeding. In another passage, the same chronicler said that "Priest Julian from the monastery of Randam in the city of Auvergne...cured those possessed with daemons."²⁰⁷ According to Gregory, Hospitius also was skillful in removing demons:

Afterwards, a woman was brought to him who, as she herself proclaimed, was possessed of three devils. Yet when he had set the Cross upon her brow with the sacred oil, the devils were driven forth, and she departed healed.²⁰⁸ And by his benediction he made whole another girl vexed by an unclean spirit.²⁰⁹

Walafrid related a miraculous cure for a girl who was possessed with an evil spirit (spiritus malignus):

...a girl of remarkable beauty was possessed of an evil spirit which tormented her in diverse manners, so that she remained almost wholly without food and would roll on the ground, foaming at the mouth and in such dire frenzy that four men could scarce hold her with all their efforts. When thirty days had

207. Hist. Franc., IV, 32. "Randanense monasterium civitatis Arvernicae presbyter praeclaras virtutis, Julianus nomine... cui inergumenos curare..."

208. Although the oil mentioned in this account would be of no medical value, the psychological effect of such a religious remedy would be beneficial to hysterical or melancholic patients.

209. Hist. Franc., VI, 6. "Dehinc mulier quaedam, quae, ut ipsa declamabat, tria habens daemonia, ad eum adducta est; quam cum tactu sacro benedixisset, atque ex oleo sancto crucem fronti ejus imposuisset, ejectis daemonibus purgata discessit. Sed et aliam puellam ab spiritu immundo vexatam, benedictione sanavit..."

elapsed from the time this malady attacked her, the fiend who had taken up his abode in her began to utter words of ill omen through her lips...the bishops arrived and found the maiden in a violent frenzy...wresting herself from the hands of those who held her, she snatched a sword from one of them and tried to kill the bishops, but failed...Next day she was lying in her mother's lap, with closed eyes, gaping mouth and limbs relaxed like one already dead; and so foul a stench issued from her lips that the place seemed to reek with fumes of sulphur...Saint Gall prayed for her...and laying his hand on her head, he said: 'In the name of the Lord Jesus Christ, O unclean spirit, I command that you come forth and leave this creature of God'. Straightway in the sight of all there issued from the girl's mouth the semblance of a bird, black and hideous.²¹⁰

This fanciful account furnishes an idea of one of the accepted symbols for an evil spirit- "a bird, black and hideous."

Vit. S. Gall., I, 15-18

210. ¹Nam filiam ejus, nomine Fridiburgam, quae illi erat unica, singulari pulchritudine fulgens, spiritus invasit malignus: a quo dum diversis torqueretur molestiis, pene continuam toleravit inedia, et saepius terrae prostata, inter spumas horribiles miserabili volutabatur insania, adeo ut vix quatuor virorum teneri posset instantia. Post triginta autem dierum circulum ex quo ei hoc accidit, coepit ille habitator malignus per eam diras emittere voces...Interea pontifices a rege transmissi venerunt, et invenerunt ipsam quidem puellam nimio laborantem furor...Illa vero tenentium manibus se excutens, vi eorum gladium abstulit, volens episcopos interficere...Jacebat autem tunc in sinu matris suae, oculis clausis, ore hianti. Membra quoque ejus ita erant disjecta, ut quasi mortua videretur. Fetor vero tam gravis oris prorupit ex adyto, ut sulphure locus ipse aspersus putaretur...Et cum surrexisset ab oratione...Impero tibi in nomine Domini nostri Jesu Christi, spiritus immunde, ut exeas et recedas ab hoc plasmate Dei...Et statim, videntibus qui aderant, exivit de ore puellae quasi avis nigerrima et horrore terribilis." Possibly the girl was suffering from a psycho-neurosis which was aided by mental therapy in the form of a religious formula.

211. Hist. Franc., IV, 12. "Deinde Guntinus alaudis episcopo, talis se reddidit, ut ab omnibus excorretur, vino ultra modum dectus. Non plerumque in tantum infundebatur potus, ut de convivio vix quatuor portaretur. Unde factum est, ut epilepsius fieret in sequenti."

212. Cf. Celsus, de med., p. 1003. Today it is known that severe epileptic convulsions may occur in steady drinkers.

Gregory mentioned several nervous disorders which seem to have been epilepsy(epilepticum²¹¹ or cadivum²¹²). An example is found in the story of Bishop Cautinus at Tours:

Now Cautinus, after his succession to the see, so demeaned himself as to be held in general loathing. He was given to wine beyond measure, and was often so far gone in drink that four men might scarce carry him from the table; the result was that at a later time he became epileptic.²¹³

In this passage one finds the interesting belief that epilepsy was the result of drunkenness.²¹⁴ The same chronicler also used the term epilepticum to describe Landulfus, a citizen of Vienne:

Landulfus, a citizen of Vienne, was long afflicted with a disease and, believing himself to be assailed by the arch-enemy, used to fall to the ground, with bloody froth spouting from his lips, and then lie for a time as if dead. This type of malady was called by the most skillful doctors, epilepsy; by the peasants it was called cadivum because those who had it fell [caderet]. The fame of Saint Martin's healing powers came to his ears, and he betook himself to his tomb, full of faith. However, the boldness of the demon only became more defiant. Close to the shrine the poor wretch might sometimes obtain a respite. Yet when he came forth, the evil spirits were again waiting their prey, and returned to the attack with a clash of unseen arms. If the sufferer threw himself on the ground, a crowd of frogs swarmed over his body, and he would hear jeering voices telling him that since he was their bond-slave Saint Martin could give no help. Only the sign of the Cross put the foul crew to flight. Then the enemy resorted to stratagem. He came

211. Greg., Hist. Franc., IV, 12; Mir. Mart., II, 18.

212. Greg., Mir. Mart., II, 18.

213. Hist. Franc., IV, 12. "Denique Cautinus adsumto episcopatu, talem se reddidit, ut ab omnibus exsecraretur, vino ultra modum deditus. Nam plerumque in tantum infundebatur potu, ut de convivio vix quatuor portaretur. Unde factum est, ut epilepticus fieret in sequenti."

214. Cf. Osler, op. cit., p. 1003. Today it is known that severe epileptic convulsions may occur in steady drinkers.

in the guise of an ancient man, professing to be Saint Martin, and commanding the afflicted one to adore him. The votary replied, 'If thou be Saint Martin, make the holy sign over me, and I will believe.' At the mere mention of the cross, the devil vanished in smoke. At last, as Landulfus stood in a sort of stupor before the Saint's image, the whole basilica shone with a strong splendor and the saint told him his prayers had been heard, and that he would be healed of his infirmity. His health returned but he began to take wine to excess, and became paralyzed on one side. Then he took the tonsure, devoted himself to the ascetic life, and once more was restored to soundness by the powers of the saint and the healthy regimen.²¹⁵

215. Mir. Mart., II, 18. "Quidam ex Viennensi territorio Landulfus nomine, graviter a lunatici daemonii infestatione vexabatur, ita ut plerumque ab hoste se vallari putans in terram corrueret, cruentasque ex ore spumas emittens, tanquam mortuus habebatur. Quod genus morbi epilepticum peritorum medicorum vocitavit auctoritas; rustici vero cadivum dixere, pro eo quod caderet. Cumque se antedictus in hoc exitu videret affligi, audita beati Praesulis fama, sanctam ejus adiit basilicam, ut sibi praesentia cunctis suffragia subvenirent. Sed cum eodem in loco plenus fide venisset, ardentius eum saevi daemonis pulsata audacia: nec ei licebat atrium egredi propter publicam daemonum infestationem: in atrio tamen nihil nocebatur. Nam visibiliter cum magno armorum strepitu venientes, conabantur eum cassi telorum acuminibus perfodere. Quod si se subderet terrae, ranarum super eum multitudo horribilis desilire videbatur. Sed et voces publice ab eo audiebantur exprobrantium, et dicentium: Martinus, quem expetisti, nihil poterit tibi subvenire, quia nostris es ditionibus mancipatus. Sed ille ad haec fidenter et immobilis signum crucis opponens, terribiliter eos per aerem tenuem effugabat. Post has autem vacuas et inanes immissiones, cum videret inimicus eum sibi vindicare non posse, dolis eum tentavit illudere. Componens namque se in specie veterani venit ad eum, dicens: Ego sum Martinus, quem invocas, surge, et adora coram me, si vis recipere sanitatem. Cui ait ille: Si tu es domus Martinus, fac super me signum crucis, et credam. At ille audito nomine signi sibi semper contrarii, tanquam fumus evanuit. Post haec autem stans ad pedes gloriosi Domini factus est in stupore mentis, et vidit beatam basilicam novo lumine effulgere; ex qua egrediens Sanctus dixit ad eum: Exaudita est oratio tua, et ecce eris sanus ab infirmitate quam pateris. Et sic beatae crucis signaculum super caput ejus faciens abscessit. Ille vero in se reversus, amotis omnibus insidiis, salutem se sensit integram recepisse. Tamen post receptam sanitatem, cum coepisset vino uti superflue, corpusque ejus diu abstentum imbre maduisset latus ei cum uno pede manumque contrahitur. Sed parcimoniae se iterum deputans, caputque tonsurans, rursum Beati virtute redditur sanitati." **The ascetic regime adopted by Landulfus could improve a condition which resulted from immoderate drinking.**

How typical of the attitude of the medieval saint is this account. Probably Landulfus was a victim of epilepsy.²¹⁶ In this passage, Gregory noticed a relationship between excessive wine drinking and paralysis of the arm.²¹⁷

Gregory and Walafrid narrated stories of persons afflicted with diarrhea (fluxum ventris and immoderato fluore). Observe Walafrid's colorful account of Sidonius, bishop of Constance:

....he entered the church of Saint Gall as though with intent to pray and stationed himself before the altar dedicated to the Saint; and there this man who deserved not that his prayers should be heard for his salvation, received condigne recompense for the sufferings he had sworn to inflict on others. For suddenly his bowels began to seethe like a saucepan over the fire and he was seized by such terrible gripings that he could never have left the church without aid; and (I am ashamed to tell it) he yielded to the promptings of nature in a way that was highly offensive to the nostrils of all present. He was thrust from out of the church without delay and at his own desire was placed in a vehicle and left the monastery. And so he took his departure, seated on a chamber-pot and undergoing most unnatural purgations. He was taken to the neighboring monastery of Augia [Richenau] of which he was abbot at the time; there his malady grew worse and the stench of his person became so intolerable that hardly any of his attendants could render their wanted services. Thus punished for his deeds, a few days later he breathed forth his spirit, from the

216. An attack of epilepsy passes so rapidly that it would be easy to connect the prayer with the natural relief.

217. Alcoholics usually eat intemperately, thus developing high blood pressure. In cases of high blood pressure, paralysis of the arm might occur. Hence, Gregory's observation of cause and effect is sound.

foul sewer of his body.²¹⁸

37

The unfortunate Sidonius seems to have had nervous diarrhea, as a result of fear.²¹⁹ Gregory related a case which probably belongs to the same category as that of Bishop Sidonius:

One of our clerks suffered from flowing bowels and fever. He felt severe pain in his abdominal cavity which spread through all of his limbs. And, on account of this malady, he became nauseated when he accepted food and vomited. However, as soon as he drank a potion in which there was holy ashes, all of his weakness disappeared and he became strong.²²⁰

218. Mir. Mart., II, 18. "Et mox oratorium beati Galli confessoris quasi oraturus ingreditur, et ante aram ipsius nomini consecratam consistit; quique ad salutem non merebatur audiri, afflictiones quas aliis se irrogaturum juraverat, convenienti satis talione recepit. Nam intestina ejus more sartaginis igni superpositae fevere coeperunt, et tam dirae viscerum torsiones illum invaserunt extemplo, ut sine aliorum adminiculo nequaquam egredi potuisset, sed (quod dicere pudet) egestio naturae turpi impetu prorumpens cum aestantes nimio fetore gravaret, sine mora ab ecclesia ejectus, vehiculo quo decedere monasterio posset, sicut regaverat, est impositus. Sicque immoderato fluore, naturae consuetudine carens, vasi in quod egesta defluerent supersedens, egressus est, et ad vicinam monasterium, quod Auva nominatur, cui et tunc praeerat, perductus est. Ubi etiam ingravescente languore, tantum sibimet famulantibus ob nimium fetorem intolerabilis factus est, ut ei jam pene nullus obsequia impendere solito potuisset, Tali itaque poena multatus, cum hoc factionum suarum praemio post aliquot dies de cloaca corporis spiritum exhalavit."

219. His death might have been caused by a ruptured appendix or intestine.

220. Mir. Mart., III, 52. "...unus clericorum nostrorum ventris fluxum incurrit cum febre, ac nimiam defectionem stomachi; et quae projiciebat per inferiorem partem, pars maxima cruor erat. Et ea causa eum magis affecerat, quia cibum quem accipiebat, invalexcente nausea, statim rejiciebat: sed protinus, ut de sepulcri pulvere bibit, omni infirmitate dempta, firmatus est." If the ashes in the sacred drink were mixed with wine, the wine would tend to check the diarrhea.

An analysis of this passage shows that Gregory carefully recorded symptoms.²²¹

Gregory and Walafrid described many cases of paralysis; eighty-seven accounts of this disease are found. Probably the conspicuous features of paralysis explain the frequency with which it is mentioned. A person suffering from paralysis was called a paralyticus²²², the disease itself paralysis²²³ or debilitas.²²⁴ A variety of expressions were used to describe paralysis of the different parts of the body: contractus,²²⁵ debilis,²²⁶ aridus et curvatus,²²⁷ simply aridus,²²⁸ cum rigore contorta,²²⁹ and aegritudo membrobrum.²³⁰

Gregory recounted one case of a temporary paralysis of the tongue (ligata lingua):

When the wife of one of our men, ^{re}Senatus traveled to disseminate the true religion, she suddenly fell to the earth with her hands waving. She was tongue-tied, not being able to speak a word with her mouth. Indeed... she was attacked by the noonday demon...²³¹

221. Cf. Osler, op. cit., pp.1027,1029. Diarrhea and vomiting are characteristic of hysterical patients. Although fever is rare in hysteria, it is sometimes found when there is pain in the various regions and vomiting.

222. Greg., Mir. Mart., II,25,27; III,35,40,49; IV,6,38. Walafridus, Vita S. Gall., II,6.

223. Greg., Mir. Mart., I,2; II,21; III,35,40; Lib. De Glor. Confess., CIII; and Walafridus, op. cit., II,44.

224. Greg., Mir. Mart., III,44.

225. Greg., Mir. Mart., I,22; II,21,31,33,42,47,48,49,56, 58; III,4,21,25,26,27,32,36,39,44,46; IV,4,22,38,41,42,45; Hist. Franc., IV,36; and Walafridus, op. cit., I,31,32.

226. Greg., Mir. Mart., I,27; II,7,31,33,42,56; III,2,4,6, 9,21; IV,14,19,23,27,34; Hist. Franc., VI,9.

227. Walafridus, op. cit., II,40.

228. Greg., Mir. Mart., II,55; IV,13.

229. Walafridus, op. cit., II,30.

230. Ibid., I,22.

231. Mir. Mart., IV,36. "Conjux Serenati hominis nostri, cum de cultura, viro praemisso rediret, subito inter manus dilapsa comitantium terrae corruit, ligataque lingua, nullum verbum ex ore potens proferre, obmutuit. Interea accedentibus ariolis, ac dicentibus eam meridiani daemonii incursum pati..." See also Hist. Franc., VIII,33. The symptoms described in this passage indicate that the poor woman was probably suffering from hysteria. The heat from the sun might have caused her to faint.

Interesting is the supposed cause of this paralysis, the "noonday demon" (daemonium meridianum). This demon may have been regarded as the spirit in the sun or the demon present during the day. The idea of the presence in natural objects of spirits or genii with good and bad powers was probably a survival of the early Greek and Roman religion; it represents a transition between the animistic and anthropomorphic concepts of gods. In one passage Gregory described his own suffering from a pain in the pharynx (fauces):

I suffered sharp, stinging pains, beginning in the pharynx and extending through the length of the neck. This impeded my voice and prevented the saliva, which usually came from the palate from passing...I was not able to digest food in the stomach or vomit.²³²

This disorder was probably paralysis of the throat.²³³

Gregory referred twice to paralysis of the arms (contractum brachium).²³⁴ In one of these instances he mentioned the fact that the tendons (nervi) were contracted.²³⁵

Gregory and Walafrid gave thirteen accounts of paralysis of the hand; of these, twelve came from the Miracles of Saint Martin (De Miraculis Sancti Martini) of Gregory²³⁶ and one from

232. Mir. Mart., III, 1. "Quae dolores commovens graves, incidebat fauces acumine, et ipsam gulam longitudine obserabat: impediabat vocis sonitum, et neque ipsum salivae liquorem, qui saepe a palato defluit, transire sinebat...Non eum rejeci per vomitum, non discessisse sensi in alvum."

233. It is also possible that Gregory was troubled with salivation from mercury; this abnormality produces inflammation of the gums and irritation of the salivary glands.

234. Mir. Mart., III, 46, 49.

235. Ibid., III, 46.

236. Ibid., II, 21, 42, 56; III, 9, 25, 26, 27, 29, 31, 32, 35, 55; IV, 4, 6, 13.

the Life of Saint Gall (Vita Sancti Galli) of Walafrid.²³⁷ One illustration will serve as a type of Gregory's descriptions of this deformity:

"A certain man...was afflicted with lameness of the hands; his fingers were so contracted that they were nailed to the palm. Occasionally the blood flowed and produced much pain..."²³⁸

The account given by Walafrid is not as detailed in regard to symptoms:

Sometime afterward a girl, one of whose hands was withered and deformed...came to the monastery with her mother. As she approached the altar in fulfillment of her vow, bearing on the palsied hand a bundle of linen which she meant to offer, her hand was suddenly cured.²³⁹

Gregory often mentioned a form of paralysis of both hands and feet (contractis manibus pedibusque).²⁴⁰ In one case the tongue (lingua debilis) was also affected.²⁴¹ He also told how an attack of the noonday demon caused paralysis of the feet:

237. Vit. S. Gall., II, 40.

238. Mir. Mart., II, 21. "Quidam...manum debilem contractis digitis detulit, ita ut unguis in palma ejus affixi, decurrente interdum sanguine, dolorem ei nimium generarent..."

239. Vit. S. Gall., II, 40. "Post aliquantulum temporis, puella quaedam jam...manus aridae et curvatae pondus ferens inutile, ad monasterium cum matre pervenit. Cumque pio voto manui torpentis globulum lini superponens, ad altare sancti confessoris accederet, impositura quod attulit, continuo manus ipsa restituta est sanitati."

240. Mir. Mart., I, 27; II, 21, 33, 39, 44, 48.

241. Ibid., II, 33. It is probable that this phenomenon was due to hysteria.

A certain clerk from the city of Poitiers while sowing in the fields of that region which belonged to the sacred basilica lost the use of his feet on account of an attack of the noonday demon."²⁴²

The clerk mentioned in this passage became prostrated, probably, by the heat of the sun. Paralysis of the legs seems to have been frequent; Gregory told of twelve cases,²⁴³ Walafrid of three.²⁴⁴ One example will show that Gregory's versions are specific:

A certain girl, Palatina, was affected by a humor which made her lose the ability to walk, and become a paralytic. She was contracted in her knee tendons and her heels were joined to her legs...²⁴⁵

An analysis of this account is interesting. The idea that diseases were due to the disturbance of the humors in the body was a classical theory which was prevalent throughout the Middle Ages.²⁴⁶ The idea that a humor made the girl unable to walk presents a tendency toward attributing disease to a physical rather than a spiritual cause.

^{242.} Mir. Mart., III, 9. "Clericus erat ab urbe Pictava in agro illius regionis, qui ad sanctam basilicam pertinebat, unius usu pedis debilis, quem, ut ipse asserebat, per incursum daemonii meridiani perdiderat..."

^{243.} Ibid., II, 5, 14, 24, 25, 47; III, 6, 9, 36, 58; IV, 41, 42.

^{244.} Vita S. Gall., II, 14, 32, 42.

^{245.} Mir. Mart., II, 14. "Palatina quaedam puella, paralysis humore percussa, usum gressuum male redacta perdiderat, ita ut contractis in poplitibus nervis, calcaneos ad crura jungeret..."

^{246.} For detailed discussion of humors cf. infra pp. 75, 96

Walafrid's accounts of paralysis of the legs are more picturesque than Gregory's, as the following example will show:

An impotent man whose limbs were so shrunken that he could not walk a step without help, was daily brought to the sepulchre of Saint Gall and laid beneath its crypt, where he used to remain engaged in prayer till the evening, when his friends came back to the hospice... Suddenly the sick man was visited from heaven (doubtless through the merits of Saint Gall whose aid he had so perseveringly implored) and began to utter loud inarticulate cries... Meantime the sufferer's joints were returning to position with a loud crackling noise like that of dry twigs broken asunder; and presently the priest saw him walk out of the crypt cured.²⁴⁷

Another of the narratives of Walafrid is particularly interesting:

"...a certain beggar was so crippled in all his joints that he was wholly unable to walk.²⁴⁸ When the priest was distributing the Saint's clothes among the poor, he gave this man his shoes and leggings. Delighted with the gift, the cripple lost no time in fitting the sacred spoils to his own legs and feet; no sooner had he done so than his joints were loosened, and leaping up, he cried out with a loud voice, giving thanks unto the Lord and to Saint Gall, to whose merits he perceived his cure to be due.²⁴⁹

247. Vit. S. Gall., II, 32. "Debilis quidam ita membris omnibus contractus ut nullo pacto per se quoquam progredi potuisset, ad memoriam beati Galli a suis perlatus, et quotidie juxta sepulcrum in crypta collocatus, dum usque ad vesperam ibidem orationibus insisteret ab eisdem ad hospitium reportabatur... subitoque praeter illos cum nullus adesset, aeger coelitus per merita, ut credimus, sancti Galli cujus suffragia sedulo flagitabat visitatus, confusa horribiliter coepit voce perstrepere... crepitum quasi virgarum in ariditate fractarum audivit: et huc illucque se prae angustia vertens, post paululum eum qui debilis fuerat, sanum de crypta prodire conspexit."

248. A similar example may be found in Ibid., II, 42.

249. Ibid., I, 31. "Erat ibi quidam mendicus tanta per omnes membrorum juncturas debilitate contractus, ut penitus inter alias suae infirmitatis molestias incessu pedum careret. Huic dum presbyter indumenta viri Dei distribueret pauperibus, caligas ejus cum calceamentis dedit. Statimque debilis, pro accepto munere summo repletus gaudio, ut sacras cruribus et plantis aptavit exuvias, per omnes artuum compages repente solutus est; et exsilens, voce clamavit ingenti, et gratias egit Domino et Gallo, per cujus merita redditam sibi videbat sanitatem." This cripple might have had arthritis (inflammation of the joints); he might have only been pretending to be a cripple; or the account may not be true.

The following account given by Gregory of a case of complete paralysis deserves attention:

During this festivity a youth came with eyes and ears closed. The poor boy could not speak; he had lost the use of his hands; and the condition of his feet prevented him from walking. What more afflictions could one have?²⁵⁰

In addition to the description of paralysis of the whole body and of specific parts, there are countless general references to paralysis or to paralytics.²⁵¹

Gregory recounted one interesting case of paralysis (contractus) of a different type from those described in the preceding section:

A certain Leomerus, a servant of Andecavinus lost a large quantity of blood. Soon he became rigid; his hands were paralyzed and his tongue was tied. For a long time he was prevented from working for himself or the Lord...²⁵²

The majority of remedies used successfully for paralysis are spiritual.²⁵³ There is one case cited by Gregory, which is particularly interesting; the boy who, from paralysis was denied the use of eyes, ears, mouth, and legs,²⁵⁴ was said to

250. Mir. Mart., III, 49. "In hac solemnitate advenit puerulus oculorum obtutibus clausis, aurium aditibus oppilatis; oris officiis obstructis, manuum usibus perditis, pedum gressibus condemnatis. Quid plura?" See also Ibid., II, 31.

251. Ibid., I, 2, 15, 40; II, 5, 6, 7, 27; III, 2, 35, 39, 40, 41, 44, 56; IV, 6, 14, 22, 23, 27, 34, 38. Greg. Hist. Franc., IV, 46. Lib. De Glor. Confess., CIII; Walafridus, Vita S. Gall., II, 44.

252. Mir. Mart., I, 32, "Leomeri ergo quidam nomine, servus cujusdam hominis Andecavini a sanguine percussus, contracta manu, ligataque lingua rigeat; multoque tempore in hac debilitate detentus, neque sibi, neque domino aliquid operis exercebat." Leomerus probably had an apoplectic stroke, resulting from a cerebral hemorrhage.

253. For them there is usually an explanation based on known medical facts. Rheumatism, arthritis, paralysis of the throat, prostration from the sun, and apoplexy could be relieved by nature; hysteria, by a religious sedative.

254. Cf. supra, p. 43.

have been quickly cured at the sepulchre by touching the "holy place" (locum sanctum).²⁵⁵ Another of the spiritual cures cited by the same chronicler warrants special comment: "It followed that the binding of the nerve was broken, accompanied by intolerable pain. Soon he returned home in complete health."²⁵⁶ In this passage Gregory seems to recognize that some sort of physiological phenomenon accompanied the miraculous cure.

Gregory recounted several cases in which both physical and spiritual remedies were used for paralysis. An example is found in the case of the woman who suffered from paralysis of the tongue as a result of an attack from the noonday demon:²⁵⁷

The people tried an appliance of herbs and verbal incantations, but were not able by medicines or skill to allay the malady... Our daughter (Eustachia, niece of Gregory)... coming to the sick woman and seeing her with the stupid herb dressing, poured oil from the holy sepulchre into her mouth. As a result the sick one began to convalesce.²⁵⁸

255. Mir. Mart., III, 49. In this passage either Gregory's description of the boy's condition or the effect of the spiritual remedy seems exaggerated for complete paralysis could not be cured psychologically.

256. Ibid., II, 6. "Dissolvebantur autem ligaturae nervorum ejus, et dirigebantur, propterea erat dolor intolerabilis; in sospitate firmatus, ad domum regressus est."

257. Cf. supra, p. 38, for discussion of Mir. Mart., IV, 36.

258. Mir. Mart., IV, 36. "...ligamina herbarum atque incantationum verba proferebant; sed nil medicaminis juxta morem conferre poterant periturae... filius ejus... Quae adveniens ad aegrotam, camque visitans, amotisque ligaminibus quae stulti indiderant, oleum beati sepulcri ori ejus infudit... aegra convaleuit." In this case of what seems to have been hysterical muteness, no medicine - particularly a crude herb remedy - would be effective. It is likely that the hysterical woman was relieved by the psychological effect of the sacred oil. There is, however, a possibility that the woman was unable to speak on account of laryngitis; in such an event, the oil would be beneficial, especially if heated.

Considering this account, one wonders whether or not these verbal incantations used with the herb were pagan formula derived from Teutonic witch doctors. Gregory's contempt for the remedy may indicate it to have been a survival of such old practices. Here Gregory also hinted at his scorn for medicines and medical skill. In another passage Gregory asserted that the sacred oil (oleum crescentum) relieved a paralytic.²⁵⁹ One more unusual, physical and spiritual remedy was mentioned by Gregory:

Indeed during the same ceremony there was a boy...who suffered from a withered hand...his hand became covered with blood of God, ascending gradually through the withered veins. So great was the quantity of blood that, by injecting a dry sponge into the lymph, he was able to drink the liquid. This, by reviving the veins, strengthening and reddening the skin, brought health to his pale hand.²⁶⁰

Eye diseases seem to have been common in Merovingian Gaul; Gregory mentioned forty cases; Walafrid, seven. Both described a number of cases of blindness in which they cited the cause of this condition. In some cases the explanation was physical; in others, spiritual. An example of a physical cause is found in the following account mentioned by Gregory: "When from

259. Mir. Mart., II, 32. A massage of oil is stimulating to any person suffering from weakness.

260. Mir. Mart., II, 55. "In eadem vero festivitate... puer manum aridam detulit...Dei, qualiter inficiebatur manus a sanguine, ascendeatque gradatim per amentes venas, et ita erat manus bibula, ut putares spongiam diu aridam lymphis injectam, sitienter haurire liquorem. Repletis ergo venis, roboratisque nervis, ac rubescente cute pallidam manum extulit sanata." In regard to this passage, the question occurs as to whether bleeding would have helped a "withered hand". Bleeding is only used today for high blood pressure; and it is unlikely that a boy would be suffering from this old-age malady. Hence, the remedy was probably of no medical value.

a fever he was disturbed by sore eyes, his lids closed with cataract, and he became quite blind."²⁶¹ Waldafrid implied a physical basis for blindness in his reference to a girl whose mother said she had been blind from birth (caeca nativite)²⁶². In another passage Walafrið stated that blindness (cute oculis) was due to the victim's having been struck by lightning: "A certain man was struck by lightning...the flesh and skin grew over his eyes till the sockets were almost obliterated."²⁶³ The fact that this man had been struck by lightning could not have influenced the formation of a skin over his eyes. Possibly he suffered from cataract. Gregory recounted a story of a woman who became blind as a punishment from sins:

A certain farm woman who had been blind for a long time began to weep and to say: 'Pity me who am blind because of sin. I do not deserve to see this festivity with the rest of the people'...later she arrived at the sacred basilica with admirable clarity of vision for by prayer her pristine sight had been restored. Indeed from that day this woman was cured from the demon by the virtue of Saint Martin.²⁶⁴

261. Mir. Mart., II, 41 "...cum a febre lippitudinis gravaretur, decidentibus cataractis, obstrictisque palpebris valde caecatus est..." Probably this man had a cataract as a result of typhoid fever.

262. Cf. infra, p. 49

263. Vit. S. Gall., II, 27. "Quidam violentia fulminis ictus...oculorum sedes ita sunt carne et cute superductis complatae..."

264. Mir. Mart., II, 28. "...quaedam mulier diuturna caecitate gravata, cum esset in villa, flere coepit, et dicere: Vae mihi, quia caecata pro peccatis non mereor hanc festivitatem cum reliquo populo spectare...completa autem oratione luci pristinae restituitur...ad beatam basilicam cum admirabili oculorum claritate pervenit. Sed et unus ex energumenis die illa Sancti virtute curatus est."

Sin and the possession of a demon were the attributed causes for this woman's blindness. Walafrid also associated blindness with sin as is revealed by his narration of the story of a certain Frumoldus:

A man named Frumoldus carried off by force two serving women from one of his monastery lands and made them his own bondservants. He had not gone very far with them when he was suddenly attacked by a terrible pain in his eyes; and from that time his sight failed rapidly till at last he was wholly bereft of the light of day, a victim to the horrors of blindness.²⁶⁵

The implied etiology of Frumoldus' blindness was his theft of the two serving women.

The cures recorded by Gregory and Walafrid for blindness were spiritual. Considering Gregory's accounts first, one discovers a number of interesting cases. The man who had cataracts as a result of fever²⁶⁶, was cured through prayer at the sepulchre of Saint Martin. In this passage, Gregory referred to the "medicine" (medicamentum) of prayer. Secondly, Priest Julian wrought miraculous cures of blindness. Thus, "There existed then in the monastery of Randan in the city of Auvergne a priest of great virtue named Julian...who gave sight to the blind.. by an invocation of the sacred name of God and the sign of the holy cross."²⁶⁷ Thirdly, through the intercession of the blessed

265. Vit. S. Gall., II, 22. "Frumoldus quidam nomine de possessione quadam ejusdem monasterii ancillas duas vi abstulit, et suae servituti subjecit...Non longe autem inde positum, subito eum dirus oculorum dolor invasit, ac deinde per momenta singula decrescente visu, caecitatis horrore damnatum, materiali funditus luce privavit."

266. Mir. Mart., II, 41. For discussion cf. supra, p. 22.

267. Hist. Franc., IV, 32. "Erat tunc temporis apud Randanense monasterium civitatis Arvernicae Presbyter virtutis, Julianus nomine...caecos illuminare...per invocationem Dominici nominis, et signaculum sanctae Crucis facile erat."

martyr, Saint Julian,²⁶⁸ sight was given to the blind.²⁶⁹ The most significant of Gregory's accounts of spiritual cures for blindness is that of the two blind men from Bourges: "Two blind men coming from Bourges, whose eyelids were dry²⁷⁰, and bound tightly together, kneeled and prayed to the blessed Lord... as they recovered their sight the blood rushed from their eyes..."²⁷¹ In this passage Gregory again mentioned a physiological element accompanying a miraculous cure. It is noteworthy that spontaneous bleeding occurred as the victim of blindness recovered his sight. The woman who attributed her blindness to sin was cured by prayer and the virtue of Saint Martin.²⁷²

Walafrid described a spiritual cure for a girl supposedly blind from birth:

268. Julian suffered martyrdom during the Diocletian (284-305 A.D.) persecutions.

269. Sancti Juliani Martyris, Liber de Passione, Virtutibus et Gloria, "Nam saepe caecorum oculi ab his tacti illuminati sunt..."

270. Gregory's comment, that the men's eyelids were dry is rather significant because there is practically no moisture in the eyes in certain types of blindness.

271. Mir. Mart., II, 29. "Duo caeci ex Biturigo venientes, arefactis palpebris, et glutino conjunctis, ad pedes beati Domini orantes decubabant... factus est super illos splendor corusco similis, et confractis ligaturis quae palpebras observant, defluente ex oculis sanguine, lateque visu patente, cuncta cernere meruerunt."

272. Ibid., II, 28. Cf. supra, p. 46 for discussion.

A woman whose only daughter had been blind (so she averred) from birth, carried her on her own shoulders to the monastery and laid her before Saint Gall's altar, then casting herself on the ground, prayed loud and fervently on her behalf. While she was yet praying, the girl began to roll suddenly from side to side on the pavement, uttering piteous cries; and in the midst of her anguish she received the desirable gift of sight...273

Obviously this account was exaggerated. Even Walafrid implied that he does not believe the girl was blind from birth.²⁷⁴ Walafrid also told of the miraculous cure of a servant girl from blindness:

It happened once that the servant maid of a certain householder who dwelt not far from the monastery, was opening the doors of the house, when a sudden and violent gust of wind blew a quantity of dust and straws into her face and eyes. The pain grew rapidly worse and by degrees her sight failed, till at last the horrors of darkness closed her round. She was brought to the church of Saint Gall and immediately her sight was restored and she went away rejoicing.²⁷⁵

ab 273. Vit. S. Gall., II, 38. "Mulier quaedam unicum filiam, ab ipsa, ut referebat, caecam natiuitate, propriis humeris monasterio advexit, eamque ante altare, sancti Galli deponens, solo prostrata, precibus pro illa diutius incubuit. Illaque orante devotius subito puella huc illucque in pavimento voluntata, miserabiliter exclamat; et inter angustias ac gemitus optato visu donata..."

274. If she suffered from congenital blindness as a result of gonorrheal infection, she could not have been cured psychologically.

275. Vit. S. Gall., II, 45. "Cuiusdam patrisfamilias non longe a monasterio commanentis ancilla, cum fortuito domus januas aperiret, turbo venti pulverem et paleas in faciem ejus et oculos projecit: statimque crescens molestia, paulatim ei usus decrevit, donec horrendis penitus tenebris cingeretur. Haec ad ecclesiam beati Galli perducta, cum ejus suffragia primo ingressu devotissime precaretur, recepto quod amiserat lumine, gaudens abscessit."

Probably the dust worked itself out of this servant girl's eyes by the time she entered the church to pray. Picturesque is the account related by the same biographer of the spiritual cure of the man who had a cataract supposedly as a result of his having been struck by lightning:

Brought home again by his friends, he went to the monastery of Saint Gall. There one Sunday when he was present at nocturns, he was overpowered by sleep and dreamt that two flaming arrows were shot from the altar and lodged in his eyeballs. Terrified by the dream, he uttered a loud cry and fell down trembling. After he had laid sometime writhing on the pavement, the skin which had formed over his eyes was cleft as though by a sword cut 276 and in a thrice he received sight and was filled with joy.

Our chroniclers mentioned few physical remedies for blindness. Gregory told of the medical method used in treating Leunast, archdeacon of Bourges:

Leunast, archdeacon of Bourges, lost sight through cataract. He went first from one doctor to another, but not in the smallest degree did he recover his vision. Then he came to the church of the blessed Martin, where abiding for the space of two or three months, and fasting continually, he prayed that he might once more possess the light of his eyes. When the feast of Martin came around, his eyes were made clear, and he began to see. However, on his return

276. *Vit. S. Gall.*, II, 27. "Is a suis perductus cum ad coenobium beati Galli venisset, et quaedam Dominica nocturnis laudibus interesset, spore depressus, quasi duas ardentes sagittas ab altari vidit emissas, et sibi in oculorum loca defixas. Statimque tanta visione perterritus exclamavit, et tremens ad terram concidit. Cumque diu in pavimento volutaretur, cute quae oculis supercrevit, velut gladii sectione recisa, continuo de luminis amissi restitutione gavisus est." In this passage, Walafrid seems either to have exaggerated the description of the malady or of the cure, for cataracts can not be removed except by operation.

home he consulted a Jew, who applied cupping glasses to his shoulders, the action of which was to strengthen his sight. As soon as the blood was drawn off, he relapsed into his former blindness. Thereupon, he came back to the holy shrine; but though he again made a long sojourn, he could not recover his vision. In my belief it was denied him by reason of his sin... Therefore let this example teach every Christian that when he has received the medicine from on high, he should not seek after worldly arts. ²⁷⁷

In this passage Gregory again revealed his contempt for the medical profession and their remedies. It is interesting that blood spontaneously flowing from the eyes during prayer was a great benefit to the blind, ²⁷⁸ but artificial bleeding by a doctor was distinctly harmful. ²⁷⁹

277. Hist. Franc., V, 6. "Leonastes Biturigus archidiaconus, decidentibus cataractis, lumine caruit oculorum. Qui cum per multos medicos ambulans, nihil omnino visionis recipere posset, accessi ad basilicam beati Martini: ubi per duos aut tres menses consistens, et jejunans assidue, lumen ut reciperet flagitabat. Adveniente autem festivitate, clarificatis oculis cernere coepit; regressus quoque domum, vocato quodam Judaeo, ventosas quarum beneficio oculis lumen augeret, humeris superponit. Decidente quoque sanguine, rursus in recidivam cacitatem redigitur. Quod cum factum fuisset, rursus ad templum sanctum regressus est. Ibique iterum longo spatio commoratus, lumen recipere non meruit. Quod ei ob peccatum non praestitum reor... Ideo doceat unumquemque Christianum haec causa, ut quando coelestem accipere meruerit medicinam terrena non requirat studia."

278. Cf. supra, p. 48 for discussion of Mir. Mart., II, 29.

279. Neither the physical nor the spiritual remedies could have any therapeutic value, if Leonast had a cataract for (as has been stated) the only successful treatment for cataract is surgery.

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Walafrid described a remedy of a semi-physical, semi-spiritual character: "For if anyone suffering from sore eyes did but take a piece of wax from those tapers [at the tomb of Saint Gall] and apply it to the parts affected, he instantly received the boon of health."²⁸⁰

Both Gregory and Walafrid frequently mentioned deafness. The cures related were spiritual. Walafrid explained the method of treating stoppage of the ears at the tomb of Saint Gall: "For if anyone suffering from stoppage of the ears did but take a piece of wax from those tapers[at the tomb of Saint Gall] and applied it to the part affected, he instantly received the boon of health."²⁸¹ Gregory told of the spiritual cure for the deafness of a certain Sigo: "Soon, thereupon, as she departed from me with her ears closed and broken from deafness, she felt as if she had heard a great wind. Thus, her hearing was restored."²⁸²

280. Vit. S. Gall., II, 34. "Nam quicumque. fatigati.. oculorum lippitudine...de eisdem ceres quippiam cerae tulerunt, et locis quae hujusmodi tenebantur incommodis aptaverunt, optatae celeriter dona percepere salutis." Although, it is impossible to know how the wax was applied, if it were melted and used as an unguent, it could be beneficial to sore eyes.

281. Loc. cit., III. "Nam quicumque. fatigati...aurium praeclosure laborantes, de eisdem ceres quippiam cerae tulerunt, et locis quae hujusmodi tenebantur incommodis aptaverunt, optatae celeriter dona percepere salutis." The wax could keep out the cold and tend to relieve temporary deafness.

282. Mir. Mart., III, 17. "Protinus igitur ut a me discessit, disrupta auris surdae claustra, et quasi magnum exinde ventum exire sentiens, auditum recepit..."

These chroniclers also referred to a number of mutes, Gregory described a girl who was mute from birth (ab utero matris suae muta processit).²⁸³ In this instance, one finds a physical rather than a spiritual cause. The cures for mutes, alleged by Gregory and Walafrid, were spiritual. In regard to the girl who was supposedly mute from birth, Gregory said:

A certain small girl, born in the city of Tours had been mute from birth...her anxious mother was instructed in a vision, to take her daughter to the sepulchre of Saint Martin. Excited and fearful, the mother brought her daughter to the sacred church. When she arrived, she prayed a long time. Indeed later, while she burned incense, she asked the child if she were making a nice perfume. The daughter answered, 'Good'.²⁸⁴

Probably this child from Tours was timid and hysterical.²⁸⁵

Walafrid told the following story of the cure of a mute:

A poor young man once came to the monastery to pray, bringing with him his brother who had long been afflicted with the loss of voice. On approaching the altar of Saint Gall, he saw a priest celebrating mass there; waiting till the sacred rites were ended, he threw himself at the priest's feet to offer prayer to the Lord on behalf of this dumb brother. The priest readily assented to his wish, and first prayed for the poor fellow, then made the sign of the cross over him and administered the sacrament of the body and blood of Christ to strengthen him. When this had been done, the bonds of his tongue

283. Mir. Mart., II, 38.

284. Loc. cit. Puella quaedam parvula, indigene Turonicae civitatis, ab utero matris suae muta processit...Mater vero de tam tristi fetu anxia, cum puellula pergit intrepida; expositaque ante sepulcrum adiret. Quae excitata ad templum sancti cum puellula pergit intrepida; expositaque ante sepulcrum Sancti, cum diutissime orasset, iterum eam secum assumit. Accenso vero thymiamate, cum eam desuper retineret, interrogat eam, si bonum ei odorem faceret? Illa respondit: Bonum. "

285. True mutes are rarely cured.

were loosened and he who on his arrival had been dumb recovered his speech.²⁸⁶

Either this account is untrue, or the man referred to was timid, and the "blood of Christ" tended to make him loquacious.

Gregory and Walafrid described cases of persons who were both deaf and dumb. No hint of the cause of such a misfortune is found. The cures were spiritual. Walafrid told of an interesting miraculous cure:

On the Sunday following, a deaf and dumb man who was well known to many of the brethren because he was accustomed to visit the monastery, was present at the regular nightly vigils; suddenly he was thrown to the ground by some powerful shock and streams of blood gushed from his mouth and ears; after which he immediately recovered the use of both organs and went away cured.²⁸⁷

286. Vit. S. Gall., II, 42. "Juvenis quidam pauperculus, orationis causa monasterium adiens, fratrem suum jamdudum amissae vocis dispendia deplorantem secum adduxit. Cumque altari sancti Galli appropinquasset, presbyterum quemdam inibi sacrosancta tractantem mysteria conspexit; et consummationem sacrae actionis opperiens, ejusdem sacerdotis ab officio redeuntis genibus advolvitur, et ut pro muto dignaretur aliquas fundere preces ad Dominum instantanter exorat. Et ille hujusmodi desiderio satisfaciens, primo orationem pro misero fecit, deinde crucis eum munivit signaculo, ac si Dominici corporis et sanguinis sacramento firmavit. Quo facto, resolutis linguae vinculis, qui mutus advenerat pristinae locutionis recepit officia."

287. Ibid., II, 38. "Insequenti quoque Dominica, surdus quidam et mutus, multorum ibi fratrum cognitioni notissimus, utpote qui idem monasterium solitus fuerat frequentare, cum nocturnis interesset excubiis, repente impulsu valido in pavementum dejectus est; statimque cum ab ejus ore et auribus plurimus sanguis prorumperet, sine mora utriusque membri munia recepit, et sanus abscessit."

In this passage Walafrid reveals an idea, found in the works of Gregory that occasionally spiritual cures were accompanied by physiological phenomena. The purifying effect of bleeding is implied. Gregory's account of the spiritual cure wrought by Saint Hospitius for a deaf mute from Angers, who was afflicted as the result of a fever, has been discussed.²⁸⁸

The people of the Merovingian period seem to have been vexed by stomach diseases (dolor ventris, morbus stomachus, and fastidius). A number of remedies were suggested for these disorders. Salvian mentioned an herb remedy: "Wormwood is a remedy for a disturbance of the stomach;²⁸⁹ its effect is counteracted by sweet draughts."²⁹⁰ The use of a counterbalancing drug is interesting. Gregory described the remedy he used for his own stomach malady:

In fact, at a recent time, I felt a pain in my stomach... Yet I knew by the words of the scripture that, through the virtue of the Saint, I should be freed from this pain. Hence, not at all by accident, I approached the sepulchre. There, alone, I poured forth my prayer, and slowly separating the fillet from the vestment, I took a piece of cloth and massaged my stomach, making the sign of the cross with my movements. Soon the pain disappeared, and I departed in health.²⁹¹

288. Cf. supra, p. 22.

289. Today wormwood is used in an infusion as an aromatic tonic for atony (want of muscular power) of the stomach and intestine.

290. De Guber. Dei, V, 1. "...Quid iuvant stomachum absinthia, si statim dulcia subsequantur..."

291. Mir. Mart., IV, 1, "Nuperrimo autem tempore ventris dolorem incurri... huius operis continetur scriptum me ab hoc dolore Sancti virtute fuisse sanatum. Accessi temerarius ad locum sepulcri, projectusque solo orationem fudi atque secretius a pendentibus velis unum sub vestimento injectum filum, crucis ab hoc signaculum in alvo depinxi: protinus dolore sedato, sanus abscessi." The treatment which Gregory employed for his own discomfort would be beneficial for any pains in the stomach. Such a massage could relieve the congestion and stimulate peristalsis (the wave motions of the intestines which forces the contents onward.)

The same chronicler also told of a remedy for the stomach diseases of a certain youth from the region of the Albigensi:

...he was weakened from contrary maladies of the stomach. Food and drink were distasteful to him...After fasting and praying for four days at the basilica of the blessed Confessor he began to feel a desire for food. Later he was strengthened by drinks of wine. Grateful for this efficacious treatment, he departed in health.²⁹²

Walafrid related an interesting cure for a man who suffered from a malady of the stomach:

A rich man in the province of the Allemanni was brought to such a pass by continuous ill-health that for well-nigh a whole year he suffered from nausea and was unable to retain the food needful for his recovery. On this account he was brought to the monastery of Saint Gall, where he daily sought relief with sighs and prayers. One day when the Mass had just ended, he received the bread of benediction from the priest's hand; as soon as he had eaten it, he was free from nausea and felt once more an appetite for food.²⁹³

292. Mir. Mart., III, 30. "Puerulus quidam ex Albigensi, tabescente diversis morbis stomacho, cibum potumque exhorrebat; ...veniendi ad basilicam beati Confessoris...jejunans et orans, die quarta accipiendi cibi desiderium capit, vinumque ore delibans confortatus est: dehinc gratias agens, sanus discessit. Undoubtedly such a dyspeptic youth as the one described in the above passage could have benefitted by fasting; and the later wine tonic could have strengthened him and developed an appetite

293. Vit. S. Gall., II, 33. "In eadem Alamannorum provincia, quidam dives tantum valetudine contraria tabefactus est, ut pene per annum integram fastidio laborans deficeret, et solatia alimentorum, ut sanitatis recuperatio poscere videbatur, percipere vel continere non potuisset...Post diuturnas igitur preces et suspiria, cum sacrae oblationis consummaretur officium, benedictionis panem de manu sacerdotis accepit. Quo comest caruit fastidio, et desiderio victualium congrue percepto..." Probably the man pictured in this account had nervous indigestion, and hence, could be helped by religious treatment.

Gregory referred to an instance of jaundice and stones (morbus regius calculusque) in the case of Domnolus, bishop of Le Mans:

After holding the bishopric for twenty-two years, and finding himself most grievously afflicted by jaundice and by the stone, he signified the choice of the abbot Theodulf as his successor...This man received the tonsure...and in forty days, on the bishop's death, succeeded to his throne.²⁹⁴

The only constitutional disease mentioned by the Merovingian chroniclers was gout. Since humor (humor) is used with the terms for gout (chiragra and podagra), this malady must have been regarded as a disturbance of the humors. In detailed fashion, Gregory described the gouty humor in the hand (humor chiragrae) of a certain Maurus:

A certain Maurus was seriously affected by a pain in the hands from the humor of gout; this descended from his hands to his legs and feet, making it impossible for him to sit upright. This malady impaired his sight, and for a long time he remained ill.²⁹⁵

294. Hist. Franc., VI,9. "Qui post viginti duos episcopatus annos, dum se cerneret morbo regio calculoque gravissime fatigari, Theodulfum abbatem in locum suum praelegit...Qui tonsuratus gradus...post quadraginta dies, migrante sacerdote, successit." Gregory's association of the jaundice and gall stones reveals rather good insight for today doctors observe that jaundice frequently accompanies gall stones.

295. Mir. Mart., II,3. "Maurusam quendam graviter chiragrici humoris dolor affecerat, ita ut retortis ad crura pedibus, nullatenus se erigere posset. Erat enim et oculorum luce mulctata: quae longo tempore graviter agens..." The symptoms mentioned in this passage warrant analysis. Gregory's statement that the pain of gout began in the hands and descended to the legs and feet is in accord with modern observation. It is also possible for gout to impair the vision. Gouty iritis may occur and produce permanent or temporary blindness; or the person afflicted with gout may have high blood pressure, accompanied by inflammation of the retina.

Both physical and spiritual remedies were successfully employed for gout. Gregory described the treatment used for this disease by Maurilo, bishop of Cahors:

Maurilo, bishop of Cahors, was grievously afflicted by the gout. However, to the pains provoked by the evil humours of the disease, he added tortures of his own. Sometimes he would apply a red-hot iron to his shins and feet, the better to increase his anguish.²⁹⁶

In this account Gregory seems to have implied that Maurilo, deliberately tried to increase his suffering; however, the red-hot iron might possibly have been applied as a counter-irritant.²⁹⁷ The same chronicler also told of using an unusual remedy for the foot gout of his father:

In truth this story is not difficult to believe because often the Lord deigns to reveal, through excellent visions, which saint to honor or which medicines to use for the sick. I recall an example from my childhood when my father suffered from foot gout, accompanied by high fever and sharp pains. As I was sleeping, I saw a person in a vision saying to me: ...Go make a little pile of wood which is able to receive the name of Christ and put the wood with the name in ink under thy father's head. It is indeed a fact, as my mother will testify, that I obeyed the orders of the person in the vision. When I had done this, my father improved. However, in the course of a year he began to suffer again from the same malady. His fever rose, his feet swelled, and his muscles were twisted with pain. At this time, in my sleep I saw another person in a vision who asked me if I knew the book of Tobias. I responded that I had not read it. The person said that the son of blind Tobias made a journey with an angel who suggested that he take the heart and liver of a fish and place the smoke from this under the eyes of his father.

296. *Hist. Franc.*, V, 43. "Maurilo Cadurcensis urbis episcopus graviter aegrotabat ab humore podagrico, sed super hos dolores, quod ipse humor commovit, magnos sibi cruciatus addebat; nam saepe candens ferrum tibiis ac pedibus defigebat, quo facilius cruciatum sibi amplius adderet."

297. Maurilo's first reaction would be painful, but there would be a reflex from the superficial skin nerves which would have a soothing effect on the internal nerves.

His father recovered by this treatment. I was told to do likewise for my father, and his pain would be relieved. I told my mother about the vision, and we followed the directions given by the person in the vision. When the fume of the smoke touched my father, his pain departed.²⁹⁸

Needless to say, the remedy described in the above passage is entirely fantastic, but it does suggest a non-spiritual type of treatment. Maurus, whose symptoms for gout, were so clearly described by Gregory,²⁹⁹ was miraculously cured by Saint Martin.³⁰⁰ Gregory also related the spiritual cure of a certain Theodus for a humor in the foot (humor pedum) :

298. Lib. De Glor. Confess., XL. "Sed nec illud absurdum est credere, quod saepius per visiones expertas Dominus revelare dignatur, qualiter aut honorentur sancti, aut infirmi medicamina consequantur. Nam recolo gestum in infantia, cum pater meus ab infirmitate humoris podagrici laboraret, et ardore febrium ac doloribus multis attenuatus, lectulo decubaret, vidisse me in visu noctis personam, dicentem mihi...Vade, inquit, facitoque hastulam parvulam ex ligno, quod hoc nomen recipere possit, scriptumque ex atramento sub paterni capitis fulcrum colloca; erit enim ei praesidium, si quod loquor impleveris. Mane autem facto, matri quae videram indicavi; jubet impleri visionis praecepta. Quod cum fecissem, statim genitor ab infirmitate convaluit. Decurso quoque alterius anni curriculo, iterum ab hoc incommodo capitur; ascendit febris, intumescunt pedes, dolore pessimo nervi interquenter. Haec illo perferente, dum cum magno genitu in stratu decumberet, vidi iterum personam in visione interrogantem me, si librum Tobiae cognitum nunc haberem. Respondi, quod non legerim. Qui ait: Noveris hunc fuisse cujus filius, angelo comite dum iter ageret, in flumine piscem cepit, cujus, indice angelo, cor jecurque sustollens, patris subfumigat oculis, qui statim fugatis tenebris lumen recepit. Vade igitur tu, et fac similiter, et accipiet refrigerium dolorum genitor tuus. Haec matri cum referrem, confestim pueros ad amnem dirigit: piscis capitur, subtracta sunt de extis quae jussa fuerant, et prunis imposita. At ubi primum fumus odoris patrem attigit, protinus tumor dolorque discessit."

299. Cf. supra, p. 58

300. Mir. Mart., II, 3. "Quae jam valde exanimis rogavit ut eam ad pedes sancti Martini deferrent...Hanc virtutem ideo hic scripsimus, qui postquam huc advenimus, illuminata est. Nam antea a debilitate sanata fuerat."

In fact a certain Theodus, the son of the presbyter, Willacharius, suffered often at this time from a humor in the foot. His feet became so inflamed that he lost the use of them. Soon he came to the holy basilica to pray. There his weakness disappeared, and his health was restored.³⁰¹

Whether or not Theodus was afflicted by gout is not clear.

Gregory recorded only one case of heart disease (tremor cordis):

A certain Aquilinus had a tremor in his heart and soon was seen prostrated. His parents, who were intelligent, were disturbed by as many diabolical influences as if they had been peasants and used the drinks and bandages of quack doctors and soothsayers. Of course these were of no value...later the parents repented and, through the intercession of Saint Martin, Aquilinus recovered.³⁰²

Aquilinus might have suffered from any type of a heart disease which was the result of high blood pressure.³⁰³ The observation by Gregory of such an internal physiological phenomenon as a pain in the heart is noteworthy. His scorn for the physical remedies of quack doctors in contrast to his faith in the healing power of Saint Martin is revealed in this passage.

301. Mir. Mart., III, 13. "Theoda vero, Willacharii quondam presbyteri filia, dum ab humore pedum frequentius laboraret, unius pedis usum, qui in debilitatem redactus fuerat, perdidit. Post haec ad beatam advenit basilicam, in qua cum crebras effunderet preces, amota debilitate, incolumitati donatur."

302. Mir. Mart., I, 26. "Quidam, Aquilinus...Erat enim ei tremor cordis, et interea videbatur exsensus. Parentes vero ejus intelligentes eum diaboli immissione trubari, ut mos rusticorum habet, a sortilegis et ariolis ligamenta ei et potiones deferebant. Sed cum nihil valerent ex more...opem Sancti poscebat assidue. Cumque in hac fide diutius commoratus ibi fuisset, omni pavore dempto, sensum ut habuerat ante, recepit, oblitisque parentibus in eo loco usque hodie pro beneficio accepto deservit." It is impossible to estimate the relative truth of Gregory's condemnation of the drinks as a remedy because he does not reveal its constituents. Bandages would be of no medical value. As heart attacks- if they are not fatal- are of short duration, the miraculous cure can be explained.

303. Possibly he had angina or clot (cororary thrombosis) in either of which maladies he might be prostrated. Then again he may have had pseudo-angina which is associated with the nervous system.

An interesting story is recorded by Gregory in which he described the remedies employed by his mother for a pain in her shin bone (dolor in uno tibiae musculo). Thus,

Indeed the virtue of the saint affected my own mother. From the time since she was in labor for my birth, she felt a pain in the muscle of her shin bone...if she rubbed her leg with an unguent, the pain was quieted for a little while...In the course of time she came to Tours either to be near the remains of the blessed saint or to be with me...Assiduously she sought aid from the sacred priest for her malady. She implored him piteously until the pain, which for thirty-four years had wearied her, departed from her leg.³⁰⁴

The permanent efficacy attributed to the spiritual treatment in contrast to the temporary relief afforded by the physical remedy (unguent) is significant.

Gregory related instances of men who suffered from kidney disorders (renes effracti³⁰⁵ and dolor renum)³⁰⁶. In one account he revealed his concept of the cause of renal disease. Thus,

There was at this time in the city a certain man who lived under the protection of the sacred mother church. On account of ruptured kidneys, he could not stand erect for walking...however, he came to the festivity of Saint Martin, and on the third day of the ceremony he was freed from this attack of the devil.³⁰⁷

304. Mir. Mart., III, 10. "Matri vero meae hoc ordine virtus Sancti subvenit. Tempore quo transactis parturitionis doloribus me edidit, dolorem in uno tibiae musculo incurrit...sed et si unguentum aliquod parumper fuisset infusum, quiescebat...Post ordinationem mea advenit Turonis vel ad occursum Antistitis sancti, vel causa desiderii mei...assidue beati Pontificis auxilium precaretur; tandem respiciente miseratione consueta, discessit dolor a tibia, qui per triginta quatuor annos feminam fatigaverat." Gregory's mother seems to have had phlebitis (an inflammation of a vein); this condition often follows childbirth. Her method of treatment - a massage with an unguent - could give temporary relief. Such a malady can be corrected without treatment, so it is easy to understand the miraculous cure.

305. Greg., Mir. Mart., III, 14.

306. Ibid., IV, 15; III, 36; IV, 15.

307. Ibid., III, 14. "Erat tunc temporis in villa, quae sub tuitione sanctae matris ecclesiae habebatur, homo quidam, qui, tanquam effractis renibus, inclinatus ambulabat...Ad festivitatem autem adveniens, tertia die post acta solemnia erectus, ab omni incursione diabolica mundatus." In the case of a ruptured kidney, bleeding could, without treatment, stop; and recovery follow.

In this passage Gregory suggested an absurd spiritual cause—
an attack of a demon. The fact that Gregory recorded an internal physiological disturbance such as ruptured kidneys (renes effracti) is noteworthy.

All of the cures alleged by Gregory for renal diseases were spiritual. The miraculous character of the cure described in the preceding paragraph is obvious. Gregory also described a supernatural cure for a certain Augustus:

In fact there was a certain Augustus, a citizen of the city of Tours, who suffered from a severe pain in his kidney. For this reason his feet became contracted, making him quite lame. For two years he endured this infirmity. Then, inspired by those who had been to the basilica of Saint Martin, he prayed and fasted for seven days. At the end of this time his health was restored.³⁰⁸

One of the most interesting of the non-contagious disorders was that described by Walafrid of a man whose arm which he had bled and whose whole body swelled (brachium cujus venam incisio vulneraverat, . . . totum corpus ejus tumore distensum est):

A brother of the community who had no mean knowledge of medicine, one day opened a vein in order to bleed himself. Very soon after he rashly set about some small piece of work, with the consequence that not only the arm he had bled but his whole body swelled up at once, and he found himself presently in danger of death, all his skill and knowledge being unavailing to save him. The night following he saw in a vision an old man standing by him, of

308. Mir. Mart., III, 36. "Augustus autem quidam civis urbis Turonicae, dum nimio renum dolore laborat, contractis pedibus et prope ad ipsos renes redactis, pessime debilitatur: in qua infirmitate per duorum annorum curricula laboravit. Deinde a suis commonitus basilicam Sancti expetivit, ibique per septem dies jejunans et orans, dempto dolore, directisque pedibus, sanus abscessit." Augustus may have had a kidney stone which passed in the course of time. The stiffness in his feet might have been due to a reflex pain from his kidneys.

serious aspect, who asked him in kindly accents the cause of his illness. He gave a full account of what had happened, whereupon the old man said: 'Forget not, my son, when daylight is restored, to anoint thy wound with the oil which is kept burning before the altar in the crypt, and straightway thou wilt regain health.' Accordingly when morning came, he told the sacristan the words he had heard in this dream, and they both entered the church, where he did as he had been told, trusting in the promise. No sooner was he anointed with the sacred fluid than the swelling went down over his whole body and he recovered complete health.³⁰⁹

If this account is authentic, the man probably had blood-poisoning.

309. Vit. S. Gall, II, 37. "Frater quidam ejusdem congregationis, medicinali scientia non ignobiliter instructus, dum quodam tempore incidit sibi cum phlebotomo venam fecisset, et praepropera festinatione post modicum quippiam operis incaute faceret, statim non solum brachium cujus venam incisio vulneraverat, verum-etiam totum corpus ejus tumore distensum est. Quae ex causa accidit ut mortem suspectam habere coepisset, quippe quia viderat suae sibi artis industriam studiosius adhibitam nihil prodesse. Sequenti itaque nocte, vidit in somnio placidae gravitatis senem sibimet assistere, causas infirmitatis blandis inquirentem sermonibus. Cumque interroganti totius ex ordine rei replicaret eventum, senex dixit ad eum: Memento, fili, ut luce terris reddita, oleo quod in crypta ante altare consuevit ardere, vulneris locum perungas, nam continuo sanitatem recipies. Itaque facto mane, quod in somnio audierat custodi ecclesiae retulit; pariterque cum illo basilicam ingressus, ut edoctus fuerat, certus de promissione peregit. Nec mora, sacro perunctus liquore, toto corpore detumuit, et assecutus est sanitatem." The oil treatment could not have relieved blood-poisoning. Probably the man gradually threw off the infection through the action of the white blood corpuscles (leucocytes) in his blood.

It is significant that only one instance of blood-poisoning was cited in the narrative sources, because of the relation of bloodpoisoning to the treatment of wounds and accidents. It has been shown that bleeding was used as a therapeutic,³¹⁰ and without care infection would have been frequent. Puschmann has stated that the people of this period were acquainted with the treatment of wounds, and that they were able to perform successfully amputations of legs, making good the loss by wooden limbs.³¹¹ Gregory related that Roeval, the court physician of Princess Chlotild³¹², effectively operated on the thigh of a young boy.³¹³ The favorable outcome of this operation indicates that some good post-operative method was used to prevent infection from the open cut. The use of surgery(sectio) as a remedy was cited by Salvian: ".the best and most skillful doctors give different cures...employ crude surgery for some..."³¹⁴ Yet Salvian's observation is mitigated by his later statement that "Cattle and flocks are cured by surgery...But we are cut and yet are not healed by the surgeon's tools."³¹⁵ From this passage Salvian seems to have believed that surgery could be efficacious on animals but not on humans; he felt that this was

310. Cf. supra, pp. 5^o, 5¹.

311. T. Puschmann, A History of Medical Education, p. 186.

312. Chlotild was the daughter of Charibert, King of Provence and Aquitaine (561-567 A.D.)

313. For discussion cf. supra p. 29, 30.

314. De Guber Dei, VI, 16. ". enim optimi ac peritissimi medici dissimilibus morbis curas...aliis adhibent duram ferri prosectionem..."

315. De. Gub. Dei, VII, 1. "Iumenta ac pecudes sectione curantur...sed nec ferri desectione..."

one of the inexplicable ways of the Lord. Yet, balancing the opposing evidence, one concludes that operations were sometimes successful, and that there was a degree of knowledge of the treatment of open cuts. Gregory hinted at the possibility of an adequate method of treating wounds in his version of the injuries of Leudast by the servants of Queen Fredegunde³¹⁶:

One of them levelled a blow which cut away the skin and hair, laying bare the greater part of his head. He took flight over the city bridge, but his foot slipped between two of the planks which form the bridge, and he broke his leg. He was thus captured; his hands were then bound behind his back, and he was committed to prison. The king commanded that he should be kept by the doctors until such a time as he should be healed of these wounds, and then be subjected to a lingering torture.³¹⁷

In this passage Gregory implied that Leudast could be healed from his wounds by the doctors, but he gave no specific information as to the treatment. The same chronicler conveyed a similar idea when he allowed Fredegunde to say to one of her enemies, "In our household are very skilled physicians, able to heal this wound. Permit it, that they visit you."³¹⁸

316. Fredegunde was the slave and later wife of Chilperic I (561-584 A.D.) of Neustria.

317. *Hist. Franc.*, VI, 22. "Ex quibus unus librans ictum, maximam partem capitis ejus a capillis et cute detexit. Cumque per pontem urbis fugeret, elapso inter duos axes, qui pontem faciunt, pede, effracta oppressus est tibia, ligatisque post tergum manibus, custodiae mane patur; jussitque rex ut sus entaretur a medicis, quoadusque ab his ictibus sanatus, diuturno supplicio cruciaretur."

318. *Hist. Franc.*, VIII, 31. "Sunt apud nos peritissimi medici, qui huic vulneri mederi possunt. Permite ut accedant ad te."

A contradiction similar to that made in regard to surgery by Salvian appears in his account of cauterization (cauter). First he said that ". the best and most skillful doctors cure certain ills by cautery..."³¹⁹ Next he referred to cauterization as a comparatively ineffective method of treating the infected parts of humans:

...When the diseased organs of mules, asses and swine have been cauterized they acknowledge the healing effect of fire, and at once when the corruption of the infected parts has been burned away...living flesh grows in place of dead tissue. Yet we are burned...and are not healed by the burning of the cautery.³²⁰

However, this passage shows a knowledge of the action of cauterization, and it is probable that this treatment was used successfully for wounds by many during the Merovingian period.

In contrast with Gregory's and Salvian's insinuations of the effective treatment of wounds was Walafrid's description of the fate of Erchonaldus, a Rhaetian wounded while he assisted his followers in desecrating the tomb of Saint Gall:

319. De Guber. Dei, VI, 16. ". Enim optimi ac peritissimi medici...quosdam curant cauteriorum..."

320. De Guber. Dei, VII, 1. "...putrefacta mulorum, asinorum, porcorum viscera, cum adusta cauteriis fuerint, munus medicae adustionis agnoscunt, statimque, ubi aut cremata..fuerit vitiatorum corporum labes, in locum demortuae carnis viva succedit...ubi aut cremata...nec cauteriorum adustione sanamur..."

He was carried home by his followers; and for the whole of that year he lay seriously ill, suffering pains unknown before, till he was weakened and his skin peeled and his hair and even his fingernails fell off.. and that the marks of divine vengeance might long be visible to all, he remained thus disfigured, a spectacle to men for the rest of his days.³²¹

In this passage Walafrid hinted that Erchonaldus was hurt as a punishment from his guilt. It is noteworthy that the followers of Erchonaldus apparently made no attempt to treat his wounds. Did the Rhaetians know less than the Franks about the treatment of wounds? It is possible that the Merovingian Franks effectively used cauterization for the treatment of wounds and that no such practice was employed by the more barbarous Rhaetians.

In The Miracles of Saint Martin (De Miraculis Sancti Martini), Gregory mentioned cures for accidents. He described several accidents of Gundulfus, a companion of the son of King Chlotar³²²:

321. Vit. S. Gall., II, 1. "Cumque a suis perduceretur ad propria, nimia infirmitate et novis doloribus coepit urgeri. Toto itaque ipsius anni curriculo fortissimis maceratus molestiis, capillorum honore et cutis superficie spoliatus, etiam digitorum ungues amisit. Et ut omnibus longo tempore ultionis in eum divinitus collatae signa paterent, cunctis vitae suae diebus hac deformitate notabilis fuit." Possibly Erchonaldus suffered from a fractured skull with a blood clot in the frontal lobe. Such a condition could lead to a partial loss of mind. The whole account seems exaggerated, but if Erchonaldus lay in bed without care his skin might peel.

322. Chlotar I was King of the Franks from 558-561 A.D.

When he was with the young prince in whose service he lived, he climbed a tree to secure a ripe apple. The limb broke and he fell. From this time he had a bruised and injured foot which made him lame. For many years the lameness persisted. One day, while mounting a horse he fell and crushed his other leg. Soon after this last accident, he was taken to the basilica of Saint Martin and cured by prayer.³²³

This account seems grossly exaggerated.

Gregory related his own suffering for many days from a headache (dolor capitis):

After thirty days, in truth, I had a pain in my head on the left side. My veins were disturbed and the tears flowed copiously. Again I rose early in the morning so that I could touch the sacred pall in the correct manner. As a result the pain disappeared, and I departed in health. However, later a headache vexed me not only in one part of the head but also all over it. Disturbed by my anguish, I proceeded to the sacred basilica...and touched my head with the pall which covered the blessed sepulchre. Soon the pain was quieted and I left the hill in health.³²⁴

323. Mir. Mart., III, 15. "In cujus dum haberetur servitio, et, ordinante rege, ascenderet in arborem, ut matura decerperet poma, effracto ramo corruit; collisque ad lapidem pede, debilitatus est. Post multos vero annos dum in hac debilitate persisteret, et ascenso equite velociter eum impelleret ad eundem, lapsante gressu, praecipitatur, compressumque pedem alium, qui sanus erat, graviter laesit. Dehinc portari se ad sanctam basilicam postulat, projectusque ad pavimentum, orationem fideliter fundit...aliquo debilitatis impedimento discurrit."

324. Mir. Mart., II, 60, "Post triduum vero dextram capitis partem similis attigit dolor. Pulsabant venae, atque ubertim lacrymae defluebant. Iterum mane consurgens, pari ut prius modo contacto velo, capite sanus abscessi...renovatur dolor qui prius ~~sanus~~ fuerat, et jam non unam partem capitis, sed totum arripuit caput. Commotus ergo doloribus, ad basilicam propero...pallaque, quae beatum operit sepulcrum, caput tetigi; mox, dolore sedato, sanus recessi de tumulto." Gregory might have had a migraine headache, or a headache as a result of digestive disturbances. Either of these maladies could disappear without treatment.

Gregory and Walafrid described persons who suffered from a toothache(dolor dentis)³²⁵ and a swollen jaw (maxilla intumescence)³²⁶. Both cited a number of spiritual remedies for the ailment. According to Walafrid, a plank which Saint Gall had told his followers not to throw away grew miraculously during the lunch hour. "This same plank, long afterwards, was much resorted to by the faithful and through the Lord's doing proved an efficacious cure for toothache..."³²⁷ The plank had become sacred and miraculous cures for toothache were supposedly accomplished by merely touching it. Of the same use was the wax (cereus) from the sacred tapers at the tomb of Saint Gall, recommended by Walafrid³²⁸ and the wattle twigs(hastula) from the old covering of the tomb of Saint Medard³²⁹ at Soissons, suggested by Gregory.³³⁰ Gregory also related another miraculous cure for toothache wrought by Aredius³³¹:

325. Walafrid., op.cit., I, 34; Greg., Hist. Franc., X, 9; and Lib. De Glor. Confess., LXXXVI; XCV.

326. Greg., Lib. De Glor. Confess., CV.

327. Vit. S. Gall., I, 27. "Quod ipsum longo deinceps tempore a fidelibus expetitur, Domino faciente, dentium doloribus efficaciter medebatur."

328. Ibid., II, 34. "Nam quicumque dentium fatigati doloribus... de eisdem ceres quippiam cerae tulerunt, et locis quae hujusmodi tenebantur optatae celeriter dona percepere salutis."

329. Medard was bishop of Soissons, circa 560.

330. Lib. De Glor. Confess., XCV, "Nam saepius de eo hastulae factae parumper acutae dolori dentium remedia contulerunt."

331. Aredius was abbot of Limoges and a contemporary of Gregory of Tours. He was canonized.

A citizen of Tours, Wistrimund, surnamed Tatto, suffered from violent toothache, which caused a swelling of the jaws. He complained of it to the holy man [Aredius] who laid his hand upon the place, whereupon forthwith the pain was driven away and never afterwards revived to cause further trouble.³³²

According to Gregory, Morigund wrought miraculous cures for those who suffered from sore throat (dolentia gula) and cold (frigor). Thus, "She often cured those with sore throats by giving them the sacred water...and many who contracted colds, in some inexplicable manner, recovered."³³³

The chroniclers mentioned examples of minor skin infections. There are records of a number of remedies for these diseases. Walafrid recounted a half-physical, half-spiritual cure for a man who suffered from running sores (ulcera emittentia):

It happened that he, [one of the monastery pupils] was attacked by a pain in his side and a long and wasting illness ensued, till finally one side of his body, from shoulder to foot, was covered with running sores and he was so feeble that he could scarcely take a step without aid. No physical remedy, however often tried, could do him any good. At last, when he was given over by all, on Saint Gall's festival the sacristan of the church collected some ashes from the Saint's coffin and mixing

332. Hist. Franc., X, 19. "Wistrimundo quoque, cognomento Tattonis, civi Turonico, dentes gravem inferebant dolorem, ex quo etiam maxilla intumuerat; quod cum beato viro questus fuisset, manum super locum doloris imposuit, statimque dolor fugatus, nusquam deinceps ad injuriam hominis excitatus est. Haec ipse qui passus est retulit."

333. Lib. De Glor. Confess., XXIV. "...gulam dolentibus, data benedicta aqua saepius medebatur...Nam quanti frigoras passi...ibi sunt sanati, viritim non potest explicari..."

them with oil from the lamp which burned before the altar, annointed the part of the boy's body which was affected. Next day he found that the sores were healed and he well."³³⁴

This monastery pupil probably had eczema. The oil from the lamp before the altar could act as a soothing mendicament for his sores, but a cure could not have been accomplished immediately. Gregory related a cure for a man with a sore (pustula):

A certain man from Italy was in such a critical condition because of an infected sore that he was carried to the basilica. He despaired to live and asked those at the temple of the blessed Saint Martin what to do. [Following their instructions] he tore a piece of garment from the tomb and placed it above the sore. As soon as his weak limb touched this material, his wound from the infected sore disappeared...³³⁵

334. Vit. S. Gall., II, 39. "Is lateris quodam dolore percussus, usque adeo gravi per longa temporum spatia infirmitate contabuit, ut in uno latere, ab humero videlicet usque ad extremam corporis partem, ulcera saniem emittentia paterent quamplurima. Qua infirmitate in tantum gravatus est, ut vix jam sine aliorum adminiculo quoquam gressum movere potuisset. Sed cum corporale medicamentum, quamvis saepissime adhibitum, nihil illi prodesset... cineres de sarcophago illius collegit, et oleum quod ante ipsum altare ardebat admiscuit, adductique corpus pueri ea parte perunxit, quam dolor possederat. Qui die altera ulceribus jam superductis sanus inventus, ab memoriam redditae sibi sanitatis reliquum vitae tempus in ejusdem sancti loci excubiis fidei devotione transegit."

335. Mrr. Mart., I, 13. "Quidam in Italia, dum veneno pustulae pervasus in discriminine sic ageretur, ut vivere desperaret, aliquos interrogat ad templum beati Martini quis fuerit.. Tunc abscissam fideliter indumenti particulam imposuit super pustulam. Mox ut aegri membra tetigit, vulnus pustulae veneni vim perdidit..."

Possibly this man from Italy had a boil which drained without medical assistance. The piece of sacred garment, which he used as a remedy, would tend to infect the sore rather than heal it.

A story was told by Gregory of a woman who was disturbed by a flow of blood(profluvio sanguini):

A certain woman from Auvergne coming with her husband from a province of Transpadane Gaul was sick on account of a flow of blood; even so she came to the entrance of the church. Prostrated, she hurled herself every day on the sacred threshold for confession, imploring the gift of health. However it happened that on a certain day she prayed and kissed the sacred pall above the tomb; she also touched her eyes with it. Soon her fever disappeared and she began to recover.³³⁶

Probably the woman described in this passage was passing through the menopause. Either temporary or permanent relief could be obtained without treatment.

Gregory also described the infections of the feet (infectos pedes) of Priest Julian of Auvergne: "From long standing, his feet were affected by a grievous humor..."³³⁷ In this passage Gregory referred to a physical cause of Julian's condition, attributing the malady to his long standing and to a disturbance of the humors.³³⁸

336. Mir. Mart., II, 10. "Mulier quaedam ex Arverno veniens cum viro suo, de pago Transaliensi, profluvio sanguinis aegrotabat... Factum est autem ut quaedam die accedens ad sanctum sepulcrum, orans, et osculans, de palla quae super est positia, aures et oculos sibi tangeret... restincta febre, convaleuit."

337. Hist. Franc., IV, 32. "...cum stando pedes ab humore haberet infectos..."

338. It is also possible that the condition of Julian was the result of a diabetic condition.

CHAPTER II

DOCTORS AND HOSPITALS OF THE MEROVINGIAN FRANKS

After considering Merovingian diseases and remedies several questions occur to the student of medicine of this period. What manner of men treated these diseases? Did the doctors have any apparatus with which to work? Were there hospitals for the care of the sick? If hospitals existed, what was their nature?

The members of the medical profession (ars medicorum)¹ were designated by various terms in the sources. The lay doctors and even Saint Martin were described as medicus² and doctor³; the royal physician as archiater⁴; the Jewish doctor as Judaeus⁵; and the charlatan as ariolus,⁶ and antichristus⁷. Lay physicians must have been rather numerous for Gregory said that Leunast went from one to another to be treated for cataract.⁸

1. Greg., Mir. Mart., III, 34.

2. References to secular physicians by the term medicus may be found in Ibid., III, 21, 36; Greg., Hist. Franc., V, 6; VI, 22; VII, 25; VIII, 31; X, 15. Marius, Chronicon, An. 581. Salvianus, De Guber. Dei, V, 1; VI, 16; VII, 1. References to Saint Martin by the term medicus may be found in Greg., Mir. Mart., II, 13, 52.

3. Anon., Vita Sancti Severini, CI.

4. Greg., Mir. Mart., II, 1; Hist. Franc., X, 15; Fredegar., Chronicum, XXVII. Dill has pointed out (op. cit., p. 261) that the use of the term archiater shows the influence of Roman ideas on Frankish medicine, and that the title archiater is familiar to the student of the Theodosian Code (Theod. Code, XIII, 3).

5. Greg., Hist. Franc., V, 6; Mir. Mart., III, 50.

6. Ibid., I, 26; IV, 36.

7. Greg., Hist. Franc., X, 25.

8. Cf. supra, p. 51 for discussion of Hist. Franc., V, 6.

The majority of lay doctors mentioned in our sources were court physicians. Even as early as Clovis (481-511) the Franks had court physicians, for in the Life of Saint Severin (Vita Sancti Severini) there is a reference to "...the doctor named Tranquillinus in the home of the king [Clovis]..."⁹ Gregory disclosed his opinion of the treatment of these doctors in the account of his suffering from amoebic dysentery:

I had suffered so much that I had no hope of life and felt destined for death. The antidotes of the doctors were not at all effective. However, desperate for my own safety, I called Armentarius, the royal doctor, and said to him: 'You have tried every expedient of your art, and all your drugs are of no avail for me on the point of death. One thing remains for me to do. I shall show you a great cure. Take dust from the sepulchre of Saint Martin and make a drink of that for me. If this does not accomplish a cure, then all ways of escape are closed. After the drink all my pain was eased and I received health.'¹⁰

Thus, Gregory had little respect for the remedies used by contemporary doctors. Yet it is noteworthy that he called the royal doctor to mix the sacred drink instead of preparing it himself.¹¹ In relation to the illness of King Theudebert, Gregory said, "The physicians lavished all their care upon him..."¹²

9. Anon., Vit. S. Severin., c.1 "...in domo regis nomine Tranquillinus doctor..."

10. Mir. Mart., II, 1. "Cumque sic ageretur mecum, ut non reme isset spes vitae, sed cuncta deputarentur in funere, nec valeret penitus medici antidotum, quem mors mancipaverat ad perdendum, ego ipse de me desperans, vocavi Armentarium archiatrum, et dico ei: Omne ingenium artificii tui impendisti, pigmentorum omnium vim jam probasti, sed nihil proficit perituro res saeculi. Unum restat quod faciam, magnam tibi theriacam ostendam. Pulverem de sacratissimo domni Martini sepulcro exhibe, et exinde mihi facito potionem. Quod si hoc non valuerit, amissa sunt omnia evadendi perfugia. Quo hausto, mox omni dolore sedato, sanitatem recepi.

11. For complete discussion of attitude of Gregory toward the medical profession cf. infra, pp. 83, 84.

12. Hist. Franc., III, 36. "Ad quem medici multa studia impenderunt..."

The position of the court physicians in relation to their rulers warrants analysis. Gregory's account of the slow torture to which King Chilperic (probably at the instigation of his wife, Fredegunde) ordered the court doctors to subject Leudast, an enemy of the Queen, has been described.¹⁵ Gregory also told how Queen Fredegunde, after causing Praetextus (Bishop of Rouen) to be stabbed in his cathedral church, went to his bedside and said, "In our household are very skilled physicians, able to heal this wound. Permit it, that they visit you."¹⁶ Probably had Praetextatus accepted Fredegunde's offer, the doctors would have been ordered to complete the work in which the assassins had failed. The fate of Donatus and Nicolaus, the chief physicians of Queen Austrechild, was recorded by Gregory:

However, ere she breathed out her vile spirit she had perceived with many a deep sigh that she could not escape; therefore would she have companions in her death, and so wrought that at her obsequies there should be sound of others wailing their own dead. She is said to have made petition to the king in the spirit of Herodias, saying: 'I should yet have had hope of life, were I not undone by the treatment of evil physicians; the draughts which I had from them have robbed me of my life, and caused me thus swiftly to lose the light of day. Wherefore I entreat thee, suffer not my death to pass unavenged; I adjure thee under a solemn oath to have them slain with the sword the moment that I shall have departed this life. If I may no longer live, let these also have no power to glory after my passing, but let a common grief fall on their friends and on mine.'

15. Cf. *supra*, p. 65 for discussion of *Hist. Franc.* VI, 22.

16. *Hist. Franc.*, VIII, 31. "Sunt apud nos peritissimi medici, qui huic vulnere mederi possunt. Permite ut accedant ad te."

From this remark there must have been a number of physicians attending each king.

The early training of the physicians, Marilef in the court of King Chilperic and Roeval in the court of Princess Clotild, deserves attention. In regard to Marilef, Gregory said, "His father had at this time the care of the church mills, while his brother, cousins and other kinsmen had been employed in the royal kitchens and the bakery."¹³ Apparently it was possible for a man of the lower classes to rise to the position of court physician. Roeval, on the other hand, had a background of education. Gregory related an interesting story of Princess Clotild and the abbess of Poitiers in which Roeval brought out this point: "I then cut out his testicles, an operation which in former days I had seen performed by surgeons at Constantinople..."¹⁴ Hence, Roeval seems to have had the advantages of the best technical training available in this period. How did the education of Marilef and Roeval compare? Since Constantinople was a seat of classical and oriental learning, probably the training of Roeval was more thorough, at least from a theoretical point of view, than that of Marilef.

13. Hist. Franc., VII, 25. "Servitium enim patris ejus tale fuerat, ut molendina ecclesiastica studeret, fratesque ac consobrini, vel reliqui parentes culinibus dominicis atque pistrino subjecti erant."

14. Ibid., X, 15. "Tunc ego, sicut quondam apud urbem Constantinopolitanam medicos agere conspexeram, incisis testibus puerum sanum genitrici moestae restitui."

So saying, she gave up her unhappy soul. After the funeral rites were duly performed, the king was constrained by the oath sworn to his unjust queen and fulfilled her wicked behest. Thus, he ordered the two doctors who had served her well to be slain by the sword. It stood plain in the judgment of thinking men that such fulfillment might not be without sin.¹⁷

In this passage, Gregory's closing remarks indicate that even one so prejudiced against lay doctors as he resented the injustice of the treatment which Donatus and Nicolaus received. In accord with Gregory's version is Marius' account of the death of Austrechild: "Because of the death of Queen Austrechild in September, 581, her two doctors, Nicolaus and Donatus, were killed."¹⁸

17. Hist. Franc., V, 36. "...sed priusquam nequam spiritum exhalaret, cernens quod evadere non posset, alta trahens suspiria, voluit leti sui habere participes, agens ut in exsequiis ejus aliorum funera plangerentur. Fertur enim Herodiano more regem petiisse, dicens: Adhuc spes vivendi fuerat, si non inter iniquorum medicorum manus interissem; nam potiones ab illis acceptae, mihi vi abstulerunt vitam, et fecerunt me hanc lucem velociter perdere: et ideo, ne inulta mors mea praetereat, quaeso, et cum sacramenti interpositione conjuro, ut, cum ab hac luce discessero, statim ipsi gladiis trucidentur, ut sicut ago amplius vivere non queo, ita nec illi post meum obitum gloriantur, sed sit unus dolor nostris pariter ac eorum amicis. Haec effata infelicem animam tradidit. Rex vero peracto ex more exsequio, oppressus iniquae conjugis juramento, implevit praeceptum iniquitatis; nam duos medicos, qui ei studium adhibuerant, gladio feriri praecepit: quod non sine peccato factum fuisse multorum censet prudentia."

18. Marius, Chronicon, An. 581. "...manse Septembri, Austregildis Regina obiit propter cujus transitum interfecti sunt duo Medici, Nicolaus et Donatus."

Marilef, whose humble origin had been discussed¹⁹, seems to have paid a penalty for his position as chief physician of Chilperic. As Gregory recounted it,

Marilef...was also hard beset by them, and though once before he had been robbed by Duke Gararic, he was now stripped a second time, so that a clean sweep was made of all that he had. They carried off his horses, his gold and silver, and any other precious things, and subjected him to the authority of the church.²⁰

One does not envy the position of the court physician of Merovingian Gaul; professional consideration was scarcely given him by either the royal family or outsiders.

The narrative sources contain only two references to Jewish doctors in Merovingian Gaul, although Dalton has said that probably the Jews at this time formed an important element in the medical profession.²¹ Gregory's version of the bleeding of Leunast, archdeacon of Bourges, for cataract by a Jewish physician, has been discussed.²² In another passage, the same chronicler reveals his antagonism for this type of doctor, referring to him as an "ancient serpent" (serpens antiquus):

19. Cf. supra p. 75

20. Hist. Franc., VII, 25, "Marileifum...ardentissime vallant; et qui jam a Gararico duce valde spoliatus fuerat, ab his iterum denudatur, ita ut nulla ei substantia remaneret. Equos quoque ejus, aurum argentumque, sive species quas meliores habebat, pariter auferentes, ipsum ditioni ecclesiasticae subdiderunt."

21. Dalton, Greg. of Tours Hist. of the Franks, II, 537.

22. Cf. supra, p. 57 for discussion of Hist. Franc.

While he (Lupus Burdegaleus, elder of the city) was hastening to the festival of Saint Martin, he met a Jewish doctor who asked him where he was going. He answered, 'I have a quartan fever and I am hastening to the basilica of Saint Martin so that his virtue will relieve me of this sickness.' The doctor remarked, 'Martin will do you no good. Whom the earth holds buried has become earthy and you are seeking his useless temple, for a dead man will not be able to give medicine to the living.' However, Lupus, despising the words of this ancient serpent went on where he had started.²³

In this passage Gregory clearly shows his concept of the relative merits of Saint Martin and the Jewish doctor; the hatred of the Jewish doctor for the saint is also revealed. One wonders whether or not the Jew hated Saint Martin as a Jew for a Christian saint, or as a doctor for faith healing; probably both elements determined his feelings. The only other evidence found in the Merovingian sources to show the attitude of the doctor toward faith healing is in the story of Tranquillinus, court physician of Clovis. This worthy doctor actually suggested to Clovis that the king seek spiritual aid from the abbot Severinus in preference to his ineffective medical treatment.²⁴

23. Mir. Mart., III, 50, "Interea advenit festivitas sancti Martini antistitis. At ille celebratis cum reliquo clero vigiliis, mane praecedit omnes, et ad basilicam Sancti festinat. Dum autem properat, obvium habuit Judaeum, et eo inquirente quo pergeret, respondit: Typum quartanum incurri, et nunc ad basilicam Sancti propero, ut me virtus ejus ab infirmitate hac discutiat. Qui ait: Martinus tibi nihil proderit, quem terra opprimens terreum fecit, et tu incassum ejus aedem expetis. Non enim poterit mortuus viventibus tribuere medicinam. At ille despiciens verba serpentis antiqui, abiit quo coeperat..."

24. Cf. infra, p. 27 for discussion of Vit. S. Severin, c.I

Gregory recorded two cases in which quack doctors (ariolii) treated patients: in the first instance, they were called for Aquilinus who suffered from a disease of the heart;²⁵ in the second, for the wife of Serenatus who had paralysis of the tongue as a result of an attack of the noonday demon.²⁶ In another passage, he referred to a magician or madman(anti-christus) who treated the sick by diabolical devices:

A certain man of Bourges, as he himself afterwards related, went into a glade to cut wood required to finish a certain work, when a swarm of flies encompassed him, in consequence whereof he was as one mad for the space of two years; from this it is evident that here was an evil device of the Devil...a multitude flocked to him, and brought their sick to him, whom, by laying on of hands, he restored to health. Those who thus came to him bestowed upon him gold, silver, and raiment. However, he, the more readily to beguile them, distributed these things among the poor, prostrating himself upon the earth, pouring forth prayers...; he would then rise, and once more bid those who stood round about adore him. He foretold the future, and to some he announced coming sickness, to others losses; only to a few did he promise good fortune to come. All these things he did by diabolical arts, and I know not what cunning tricks...The bishop, astounded at these doings, sent to him stout fellows to ask of him the meaning of his proceedings. One, who was foremost among them, first bowed down as if to kiss his knees, thus impeding his movements, and commanded

25. Cf. supra, p. 60 for discussion of Mir. Mart., I, 26.

26. Cf. supra, p. 38 for discussion of Ibid., IV, 36.

him to be seized and stripped; he then in a trice drew his sword and cut him to pieces. So fell and died this Christ, who should rather be called Antichrist, and all his following were dispersed...²⁷

The method of paying this antichrist is interesting; one wonders if this was the usual procedure in remunerating those thought to be divinely appointed as healers. This reference and the account of the theft of horses, gold and silver, of Marilef, by the enemies of King Chilperic²⁸, indicates that both secular and religious doctors were generously rewarded with gifts for their services. The small number of times in which Gregory referred to charlatan doctors is noteworthy, for his scornful attitude toward the medical profession would indicate that he thought most of the doctors were quacks.

27. Hist. Franc., X, 25, "Quidam enim ex Biturico, ut ipse postmodum est professus, dum saltus silvarum ingressus, ligna caederet ad explendam operis cujusdam necessitatem, muscarum cum circumsevit examen, qua de causa per biennium amens est habitus: unde intelligi datur diabolicae emissionis fuisse nequitiam...Confluebat ad eum multitudo populi, exhibens infirmos, quos contingens sanitati reddebat. Conferebant enim ei aurum argentumque, ac vestimenta, ii qui ad eum conveniebant. Quod ille, quo facilius seduceret, pauperibus erogabat, prosternens se solo, effundens orationem...et surgens se iterum a circumstantibus adorari jubebat. Praedicebat enim futura, et quibusdam morbos, quibusdam damna provenire denuntiabat, paucis salutem futuram. Sed haec omnia diabolicis artibus, et praestigiis nescio quibus agebat...Quod stupens episcopus, direxit ad eum viros strenuos, inquirentes quid sibi vellent ista quae gereret. Unus autem ex iis qui erat senior, cum se inclinasset quasi osculaturus genua ejus ac discussurus viam illius, jussit eum apprehensum spoliari: nec mora, ille evaginato gladio in frustra concidit, ceciditque Christus ille, qui magis Antichristus nominari debet, et mortuus est, dispensique sunt omnes qui cum eo erant."

28. Cf. supra, p. 78 for discussion of Hist. Franc., VII, 25.

In the Merovingian sources there are also illustrations of the participation of women in the care of the sick. The attention to suffering given by Queen Radegunde is revealed in the account of her life;²⁹ according to Sudhoff, she established a convent hospital at Poitiers in the middle of the sixth century.³⁰ The healing of such disorders as quartan fever, sore throat and colds by the good woman Morigund has been discussed.³¹

The statements of Puschmann in regard to the part played by women in the care of the sick, though unsupported by adequate historical evidence, are interesting. According to him, women practiced the healing art and worshipped Eric, a goddess of medicine. He also said that among the early Franks midwifery was delegated to the women; and that Brunhilda,³² who was called "the doctress", believed in the efficacy of runes of a certain kind for the delivery of children.³³

29. Anon., Vita Radegundis, I, 24. "...per aegrotantes inferens..."

30. Sudhoff, Gus der Geschichte der Kranken. im fruheren Mittelalter, p. 184.

31. Cf. supra, p. 18 for discussion of Lib. De Glor. Confess., XXIV.

32. Brunhilda was a high-spirited, statesman-like Visigothic princess who married Sigibert, King of Austrasia (561-575). It is possible that Brunhilda established a hospital at Gutum near the close of the sixth century. Cf. infra, p. 92.

33. Puschmann, op. cit., p. 185 et seq. In regard to the worship of Eric, Puschmann cites his source of information as T. K. Weinhold, Altnordisches Leben, p. 385 et seq. He gives no references for his other statements.

It is interesting to compare the attitudes of the contemporary writers^{and} of the people towards lay physicians. Gregory was unflattering in his description of these doctors. In one instance he referred to the subtleties of doctors (medicorum argutiae).³⁴ His low opinion of the Jewish doctor is revealed by his description of him as an ancient serpent (serpens antiquus);³⁵ Whether he hated the Jew as a doctor or as a Jew is not indicated. In another passage he questioned the power of the art of medicine (ars medicorum): "...in no form of sickness can the art of medicine prove efficacious unless it is aided by the will of God."³⁶ In the passage in which he described the divine cure of Leunast for cataract (after the bleeding treatment had failed) he warned his readers never to trust mundane medicine (medicina terrena) in preference to celestial aid.³⁷ Yet, in spite of his sanctimonious attitude toward consulting doctors,³⁸ Gregory himself went to them for treatment for dysentery³⁹ and headache.⁴⁰ After their treatment

34. Mir. Mart., III,60.

35. Ibid., III,50.

36. Ibid., III,34. "...in qua aegritudine nihil medicorum poterat ars valere, nisi cum dominicum adfuisset auxilium."

37. Cf. supra, p. 51 for discussion of Hist. Franc., V,6.

38. It is interesting to contrast the attitudes of Saint Gregory of Tours and Pope Gregory the Great on this point. Gregory the Great, though a believer in miracles, did not hesitate to recommend the Roman doctors to his sick friends. An example is found in the case of Marinianus, bishop of Ravenna, who may have had consumption. Gregory the Great consulted doctors about Marinianus, getting their advice by letter. Cf. F.H.Dudden, Gregory the Great, I,445.

39. Cf. supra, p. 12 for discussion of Mir. Mart., II,1.

40. Cf. supra, p. 68 for discussion of Ibid., II,60.

proved ineffective; he explained the failure by the fact that their remedies were not divinely consecrated. Gregory's belief in the greater efficacy of Saint Martin's curative powers to those of doctors will be discussed in connection with the religious healers.⁴¹ Although, in describing the disease of Landulfus, Gregory said it was called epilepsy (epilepticum) by the authority of the most skillful physicians (auctoritas peritorum medicorum),⁴² he does not seem to have thought that even the "most skillful" of the secular doctors were capable of healing; in fact he frequently pointed out the superiority of the sacred drink (potio de pulvere sepulchri) to the remedies of doctors.⁴³ In one passage Gregory goes so far as to characterize the remedies of lay doctors as "more conducive to pain than healing."⁴⁴ Yet Gregory did not sanction the murder of doctors to avenge the death of their patients.⁴⁵ In the same passage, the only evidence of the attitude of the populace toward lay physicians is found; "many people of wisdom" (prudentia multorum) resented the murder of Donatus and Nicolaus, the physicians of Queen Austrechild, as a punishment for her death,⁴⁶

41. Cf. infra, p. 87 for discussion of Mir. Mart., II, 13.

42. Cf. supra, p. 34 for discussion of Ibid., II, 18.

43. Examples may be found in Ibid., II, 12; III, 43; IV, 9 and Lib. De Glor. Confess., XXIV.

44. Mir. Mart., II, 19. "Quid unquam tale fecere cum ferramentis medici, cum plus doloris negotium exerant, quam medelae.

45. Cf. supra, p. 77 for discussion of Hist. Franc., V, 36.

46. Loc. cit.

Salvian seems to have been more tolerant of the doctors; he reveals his belief in the ability of doctors when he compared the people's complaints against the Lord with those of an impatient invalid against "an excellent doctor" (optimus medicus)⁴⁷. In another passage the same writer referred to the "best and most skillful doctors" (optimi ac peritissimi medici) in respectful tones.⁴⁸ Walafrid mentioned a man who "had no mean knowledge of medicine" (medicinalia scientia non ignobiliter instructus)⁴⁹. The anonymous writer of the Life of Saint Caesarius⁵⁰ (Vita Sancti Caesarii) mentioned the doctors at Arles, describing them as spiritual and attributing to them the recovery of health by Caesarius.⁵¹

The unenviable lot of the Merovingian medical man is further illustrated by the fact that every deceased saint and certain living holy persons were rivals of the doctors. The differentiated healing powers of the various saints was pointed out by Walafrid:

It also happens at times that one who through the secret judgment of God is a victim not to one disease only but to many, does not get rid of all his ailments

47. De Guber. Dei, V, 1, "...Ac per hoc dum legem divinam deseris, salutem propriam derelinquis. Non aliter ergo nos de dominica lege querimur, quam queri de optimo medico impatiens aegrotus solet..."

48. Ibid., VI, 16.

49. Cf. supra, pp. 42, 43 for discussion of Vit. S. Gall, II, 37.

50. Caesarius (b. circa, 470, d. circa, 543) ruled the see of Arles from 503 to 543 with courage. He was one of the foremost of the bishops of Gaul, and was particularly famous for his monastic rules.

51. Anon., Vita Sancti Caesarii, c. VII, "...ubi etiam si medicus adesset fervens ad spiritalia... causa recuperandae salutis adduci..." Dill (op. cit., p. 263) says that the doctors at Arles inherited the Greek science lingering there.

at once but at different times and through the intercession of different saints, the cure of one particular disorder being granted to the merits of one saint and complete restoration to health being reserved to the prayers of another.⁵²

This passage also shows the current belief that diseases were the result of the "secret judgment of God." If one accepts the statements of Puschmann, not only the Christian saints but also the great pagan god Odin⁵³ had ability in the art of healing.⁵⁴

In the sources there are many accounts which demonstrate the curative powers of Saint Martin, Saint Gall, Saint Julian, the martyr, and Saint Radegund.⁵⁵ According to Gregory, Saint Martin had the power to relieve people who were insane, deaf, dumb, victims of eye diseases, persons who were paralyzed, those who had such diseases as meningitis, amoebic dysentery, leprosy, gonorrhea, fevers, diarrhea, gout, stomach disorders, renal diseases, heart ailments, phlebitis, accidents, headache, toothache, colds, sore throat, menopause and infections of the feet; even cattle suffering from the bubonic plague were cured through his influence.⁵⁶

52. Vit. S. Gall., II, 27, "Fit etiam interdum ut qui Dei occulto iudicio non uni sed pluribus infirmitatibus subjacet, non pariter omnia, sed diversis temporibus et intercessoribus debilitatis amittat incommoda: ut dum alicujus remedium mali per unius merita sancti conceditur, redintegratio sanitatis alterius precibus et honori servetur."

53. Odin was the chief god of northern mythology.

54. Puschmann, op. cit., p. 186.

55. Cf. supra, Chapt. I passim.

56. Loc. cit.

Often touching a sacred object or drinking a potion, the constituents of which came from the basilica of this saint were the means by which the cures were accomplished; prayer to Saint Martin was also an effective remedy in many instances.⁵⁷ Comparing the merits of Saint Martin with those of a lay physician, Gregory said:

What doctor can be found who applies two medicines to one disease as Saint Martin who opens the physical eyes of the body and the spiritual eyes of the heart, so that the patient does not desire earthly things.⁵⁸

In the Life of Saint Gall (Vita Sancti Galli), Walafrid described many cures wrought by Saint Gall before and after his death.⁵⁹ Summarizing Saint Gall's abilities, this chronicler said

many other bodily infirmities (in addition to restoring the dead to life) have been and still are healed there (at the tomb of Saint Gall) by the Lord's bounty; demoniacs have been cured and sick persons restored to health, deaf ears have been opened and eyes purged of their mists, the silence of the dumb hath been broken, the impotence of the palsied removed...⁶⁰

57. Cf. supra, Chapt. I, passim.

58. Mir. Mart., II, 13, "Quis unquam, rogo, talis medicus poterit inveniri, qui in una infirmitate duas contulerit medicinas? Ecce in uno caeco duae virtutes ostensae, cui corporales oculos ad contemplanda terrena prius aperuit, et nunc cordis oculos ut ea non concupiscat illuminavit..."

59. Vit. S. Gall., passim.

60. Ibid., II, 6, "...caeterarum infirmitatum remedia creberrima inibi largitate a Domino praestita sunt et praestanter. Siquidem et daemones ibidem, et languentes sunt recreati, aurium claustra reserata, oculorum detergae caligines, mutorum exclusa silentia, paralyticorum eliminata defectio..."

Even gifts to the church of Saint Gall proved a health-giving charm to a certain Willimar. According to Walafrid,

...Willimar, suffering from a severe illness, promised, if restored his former health, to give a horse and two cows to the church of Saint Gall. From that day he obtained relief...and fully recovered his health.⁶¹

The same chronicler enthusiastically described the popularity of Saint Gall's tomb for the sick:

Later such efficacious power in the healing of divers disorders was manifested at the Saint's tomb to all who came and implored his intercession in faith, that the report went out to all the neighboring regions and their inhabitants resorted thither in numbers.⁶²

The ability of Saint Julian, the martyr, to relieve the blind and those with tertian and quartan fever has been discussed.⁶³

In regard to living holy persons who treated diseases there are a number of illustrations in the sources. The miraculous cures of the good woman, Morigund, at the church of Saint Martin at Tours, has been narrated.⁶⁴ The therapeutic ability of Abbot Severinus of Jura,⁶⁵ of the priest, Julian of Auvergne⁶⁶ of Domnolus, bishop of Le Mans,⁶⁷ and of Aredius of Tours,⁶⁸

61. Vit.S.Gall., II, 8, "...Williamarus, gravi infirmitate depressus, sub voto promisit se equum vivum duosque boves, si pristinae restitueretur sanitati, ad ecclesiam beati Galli donaturum. Cumque illa die confortaretur, et plenam recepisset sospitatem."

62. Ibid., I, 34, "Post haec tanta virtus ad sanandos variis infirmitatibus depressos, apud sepulcrum beati viri cunctis illuc venientibus, et orationem ejus suffragia fideliter postulantibus apparuit, ut et fama tanti meriti cunctis quae circumpositae erant regionibus innotesceret, et locus ipse non mediocriter frequentaretur a populis."

63. Cf. supra, p. 48 for discussion of Lib. de Vit. Juliani.

64. Cf. supra, p. 18 for discussion of Lib. De Glor. Confess., XXIV/

65. Cf. supra, p. 27 for discussion of Vit. S. Severini, C. I

66. Cf. supra, p. 47 for discussion of Hist. Franc. IV, 32.

67. Cf. supra, p. 57 for discussion of Ibid., VI, 9.

68. Cf. supra, p. 67 for discussion of Ibid., X, 29.

has been discussed. Walafrið stated that clerics were delegated with the task of attending to the needs of the sick:

Willimar received him [St. Gall] with every kindly attention, assigning him a dwelling close to the church and charging two of his clerics, Magnoald and Theodore, to tend him and do their utmost for his recovery.⁶⁹

There is little historical evidence in regard to the equipment of the Merovingian doctor. These physicians had the cupping glass(ventosa),⁷⁰ and the sponge(spongia),⁷¹ which they used for bleeding. Along the Meuse and Somme rivers archeologists have found sixth century metallic bandages which were used for hernia.⁷² Surgeons must have used tools, and Salvian's reference to "crude surgery" (dura prosectio) implies that these instruments were of a primitive type;⁷³ however, this is the only indication that Merovingian medical equipment was either barbarous or primitive.

The cures wrought at the churches of Saint Gall and Saint Martin indicate that the medieval churches were great spiritual hospitals for the ills of both the soul and the body.⁷⁴

69. Vit. S. Gall., I, 9, "Qui suscipiens eum cum omni charitatis obsequio, domum vicinam ecclesiae ejus necessitati concessit, et duobus clericis suis Magnoaldo et Theodoro hanc sollicitudinem commendavit, ut cum omni diligentia ejus recuperationi servirent."

70. Greg., Hist. Franc., V, 6, 35.

71. Greg. Mir. Mart., II, 55.

72. Deneffe, "Les Bandages hernieres a l'epoque Merovingienne" Janus, V(1900), 584.

73. Salvian., De Guber. Dei, VI, 16.

74. The similarity of the modern shrine and hospital at Lourdes, France, and the medieval churches is striking. Some of the cures achieved at Lourdes are even more difficult to explain on the basis of modern medicine than those recorded of Saint Martin and Saint Gall. Cf. "The Miracles of Lourdes", Fortune, IX(1934), 53.

As Dill has observed, the church of a healing saint in the time of the Merovingians resembled something of the tone and spirit of a temple of Aesculapius in the reign of the Antonines except that there was a more orderly calm and more faith in science at Epidaurus than at Tours.⁷⁵ In addition to the churches, there were the hospices(hospitium) attached to the monasteries in which the sick and strangers were attended; these, according to Neuburger, were the "only ray of light in this period."⁷⁶ Probably Saint Gall was assigned to a hospice by Willimar.⁷⁷ It was part of the Benedictine rule to care for the sick and poor, and buildings were erected especially for this purpose adjoining these monasteries.⁷⁸ However, the existence of many Benedictine monasteries in Merovingian Gaul is questionable. According to Dalton, a Benedictine abbey was founded by Saint Maur in Anjou (circa 543); and another was established at Fleury on the Loire near Orleans before 550.⁷⁹ Thompson states that Saint Maurus in 541 took the road to Frankish Gaul and founded the first Benedictine abbey north of the Alps at Glanfeuil, near Angers, upon the banks of the Loire.⁸⁰

75. Dill, op.cit., p.262.

76. M. Neuburger, Geschichte der Medizin, p.262.

77. Cf. supra, p.89 for discussion of Walafrid, op.cit., I, 9.

78. For citation of the part of the Benedictine rule which stipulated the care of the sick, cf. infra, p.157.

79. Dalton, Greg. of Tours Hist. of the Franks, I, 367.

80. James Westfall Thompson, The Middle Ages, I, 227.

In both the primary and the reliable secondary sources there are references to religious hospitals in Merovingian Gaul. The writer of the Life of Saint Caesarius (Vita Sancti Caesarii) told how this saint showed his charity and broad-mindedness in his care for the sick: "The good abbot is concerned about the sick, and among his disciples, he assigned certain persons to attend invalids..." The hagiographer added that part of the convent at Arles was used for administering remedies to the sick.⁸¹ Gregory mentioned the hospital for lepers (xendochium leprosorum) erected by Agricola, a pious and ascetic bishop of Chalon-sur-Saone, outside of his episcopal city.⁸² Sudhoff refers to a hospital which was established early in the sixth century by Regimus, bishop of Rheims.⁸³ The same author said that Radegunde founded a convent hospital at Poitiers in the middle of the sixth century.⁸⁴ Sudhoff also cited religious hospitals in the seventh century; he mentioned a Hospitalia Scotorum; a hospital at Nivelles called the Saint Nicolas Hospital; and another at Tournai which was called the Hospital of the Brothers and Sisters of Saint Victor.⁸⁵

81. Anon., Vit. S. Caesar, VII. "Cumque de infirmitate ipsius abba sanctus graviter turbaretur et...discipulum quem-admodum esset aegritudo divisa...in coenobio...eidem remedium posse praestari..."

82. Lib. de Glor. Confess. LXXXVI, "Quod audiens benedictus Agricola episcopus, misit archidiaconum suum, ut beatum urbis coemeterio deferret: sed resistentibus monachis, quod jussus fuerat non implevit. Posthaec, aedificato xendochio leprosorum sacerdos suburbano..."

83. Sudhoff, Aus der Geschichte der Kranken im fruheren Mittelalter, p. 183, note 2.

84. Ibid., p. 184.

85. Ibid., p. 183, note 2.

Questionable is the existence of the famous Hotel Dieu in Paris. Sudhoff said that the foundations of it go back to Childebert I;⁸⁶ according to Häeser, this hospital was founded in 660.

Although it is sometimes difficult to determine which are secular and which are religious hospitals, the following seem to have been lay institutions: the hospital established at Lyons by Childebert I in the first half of the sixth century;⁸⁸ that founded at Tours and another at Paris in the sixth century;⁸⁹ that established by Brunehilda at Autem toward the close of the sixth century;⁹⁰ that founded by Dagobert (629-639) at Paris in the first half of the seventh century;⁹¹ the leper quarters at Metz in 636 and 650⁹², and those at Verdun in 656.⁹³

86. Sudhoff, p.183. Childebert I ruled the region around Paris from 511 to 558.

87. Häeser, Geschichte christlicher Krankenpflege, IV,28.

88. J.D.Mansi, Sacrorum Conciliorum nova et amplissima Collectio, IX,132, It is interesting that this hospital was especially guarded against spoliation by the Council of Orleans in 549.

89. Sudhoff, op.cit., p.183, note 2.

90. Anon., "Hospitals", Catholic Encyclopedia, VII,482.

91. Loc.cit.

92. Sudhoff, op.cit., p.200, Sudhoff says that the existence of this leper quarter is doubtful.

93. Ibid., p.201. Sudhoff also says that he is dubious of this leper quarter.

CHAPTER III

DISEASES AND REMEDIES OF THE CAROLINGIAN PERIOD

In the Carolingian sources there is medical information for both general and specific diseases and remedies. General theories relating to diseases and remedies were expanded by Raban, abbot of Fulda. In regard to the term

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All sufferings of the body are encompassed in the general vocabulary of diseases; for this reason the ancients have called suffering *morbus*, so that they might demonstrate by this name the force of death (*perire*) which term is derived from disease.¹

The other terms for disease most frequently found in Carolingian works were *afflictio*,² *infirmus*,³ *severitas*.⁴

1. Rabanus Maurus, *De Universo*, XVIII, 5. "Morbi generatim vocabula sunt passiones corporis continentur: quod loco veteres morbus nominaverunt, ut ipsa appellatione mortis vis, quae ex eo nascitur, demonstraretur." *Morbus* is used to denote a general disorder in the following passages: Egilhardi, *Vita Caroli*, XXX; Rabanus Maurus, *De Universo*, XI, 1; Anon., *Lexicon Carolinum*, An. 874; Hlud., *Vita Regis Rurici*, c. XIV; Theodulf, *Carmina*, 1; Alcuin, *Epistolae*, LXXXVIII; Salicgarus, *De Ecclesiastica*, 1, 2, 4, 5, 6, 12; Dungal, *De Artibus Liberalibus* (M. G. H. Poet., I, 400).

2. Raban., *De Universo*, XX, 25; XVIII, 3; Alcuin., *Epistolae*, XLIV, LXII, LXXXVIII, CXIV, CXIX, CXXV, CXXVI; Winchard, *Annals*, An. 876; Egilhardi, *Annals*, An. 882; Hlud., *Vita R. Rurici*, c. XIV; Rhabertus, *Vita Regis Rurici*, c. XI; Lupus, *Epistolae*, LX.

3. Raban., *De Universo*, XVIII, 5; Egil., *Epistolae*, XLIV, CXXIV; Alcuin., *Epistolae*, CXXVI; Hlud., *De Regibus*, I, 11; III, 10 IV, 19; Benedictus, *Regula Sancti Benedicti* (Patrol. lat., CII, 638).

4. Raban., *De Universo*, VI, 1; XI, 25; XVIII, 5; Egil., *Annals*, An. 768, 769, 815; Hlud., *De Regibus*, III, 3.

CHAPTER III

DISEASES AND REMEDIES OF THE CAROLINGIAN FRANKS

In the Carolingian sources there is medical information for both general and specific diseases and remedies. General theories relating to diseases and remedies were expounded by Raban, abbot of Fulda. In regard to the term "disease", he said:

All sufferings of the body are encompassed in the general vocabulary of disease; for this reason the ancients have called suffering morbus, so that they might demonstrate by this name the force of death (mortis) which term is derived from disease.¹

The other terms for disease most frequently found in Carolingian works were infirmetas,² infirmus,³ aegritudo,⁴

1. Rabanus Maurus, De Universo, XVIII,5. "Morbi generali vocabulo omnes passiones corporis continentur: quod inde veteres morbum nominaverunt, ut ipsa appellatione mortis vim, quae ex eo nascitur, demonstrarent." Morbus is used to connote a general disorder in the following passages: Eginhardi, Vita Karoli, XXX; Rabanus Maurus, De Universo, XI,1; XVIII,5; Anon., Regionis Chronicon, An.854; Eigil, Vita Sancti Sturmi, c.XIV; Theodulf, Carmina I; Alcuini, Epistolae, LXXXVIII; Halitgarius, De Poenitentia, I, 2, 4, 5, 6, 12; Dungal, De Artibus Liberalibus (M.G.H. Poet., I, 408).

2. Raban., De Univer., IX,25; XVIII,5; Alcuin., Epist., XLIV, LXII, LXXXVIII, CXIVI, CXLIX, CLXXXVIII; Hincmar, Annales, An.876; Eginhardi, Annales, An.822; Eigil., Vit. S. Sturmi, c.XIV; Rimbartus, Vita Sancti Anskarii, c.XL; Lupus, Epistolae, LXV.

3. Raban., De Univer., XVIII,5; Egin., Epist., XXV, XXXIV; Alcuin., Epist., XCVI; Halit., De Poenit., I, 11; III, 16; V, 19; Benedictus, Regula Sancti Benedicti (Patrol. lat., CIII, 639).

4. Raban., De Univer., VI,1; IX,25; XVIII,5; Egin., Annal. An.768, 789, 815; Halit., De Poenit., III,3.

aegrotus,⁵ and aegrotare;⁶ while languor,⁷ languet,⁸ languidus,⁹ infirmus,¹⁰ valetudo adversa,¹¹ valetudo imbecilla corporis,¹² invalidus,¹³ egrotis,¹⁴ clinica,¹⁵ and humor¹⁶ were employed occasionally. For pain in a specific part of the body dolor¹⁷ is more often found, but passio,¹⁸ aegrus,¹⁹ and laboro²⁰ have the same connotation.

Physical and spiritual ideas for causation of disease were related by Raban. The most important physical theory was that of the humors:

5. Alcuini, Epist., CXII, CLXXXVIII; Halit., De Poenit., V, 19; Lupus, Epist., LXXII.
6. Egin., Annal., An. 788, 818; Lupus, Epist., LXXII; Eigil., Vit. S. Sturm, c. XIV; Halit., De Poenit., III, 16.
7. Raban., XVIII, 5; Alcuin., Capitula, XXI; Versus De Sanctis Euboricensis Ecclesiae. (*Patrol. lat.* CI, 820)
8. Theodulfi, In Xenodochio. (*Carmina*, M. G. H., Poet., I, 554)
9. Dungali, De Art., Liberal. (*M. G. H. Poet.*, I, 408)
10. Halit., De Poenit., II, 1.
11. Egin., Annal., An. 800, 802.
12. Egin., Epist., LII.
13. Karoli Magni Capitularia, XXXI.
14. Dungal., De Art., Liberal. (*M. G. H. Poet.*, 408)
15. Notker I, Gesta Karoli, II, 17.
16. Egin., Annal., An. 794; Raban., De Univer., VI, 1.
17. Raban., De Univer., XVIII, 5; XIX, 8; Alcuin., Epist., XCVI; Halit., De Poenit., Praefatio; Walafrius Strabus, De Cultura Hortorum, XIV, XXII; Egin., Vita Karoli, c. XXX.
18. Raban., De Univer., XVIII, 5; Walafrius, De Cultur. Hortor., XX; Anon., Regionis Chronicon, An. 854; Hincmar, Annales, An. 866, 876.
19. Walafrius, De Cultur. Hortor., X.
20. Rimbertus, Vit. S. Anskarii, c. XL.

All diseases arise from the four humors, that is from the blood, black and yellow bile, and phlegm. Moreover by these the healthy are strengthened, and the weak afflicted. When they increase beyond the course of nature, they cause sickness. As there are four elements so there are four humors, and each humor has the property of its own element. Blood has the properties of air; cholera (yellow bile) of fire; black bile of the earth; and phlegm of water. Thus, as there are four humors, there are four elements which conserve our bodies. The blood from Greek etymology assumes its meaning, because it invigorates, sustains, and gives life. The Greeks named cholera because it is ended by the space of one day; from this cholera, or yellow bile, is the flowing of the bile...Melancholia is so-called because it is made from black bile...The Greeks call melan black, and they call fel "cholen". The latins called a man sanguine because he is pleasant; so men in whom blood rules are called affable and flattering. They called whatever was cold phlegmatic. Indeed the Greeks called rigor phlegmona. By these four humors, as we have said, the healthy are strengthened and the sick afflicted.²¹

21. De Univer. XVIII,5. "Morbi omnes ex quattuor nascuntur humoribus, id est, ex sanguine et felle, melancholia et phlegmate; ex ipsis enim reguntur sani, ex ipsis laeduntur infirmi. Dum enim amplius extra cursum naturae creverunt, aegritudines faciunt: sicut autem quatuor sunt elementa, sic et quatuor humores: et unusquisque humor suum elementum imitatur: sanguis aerem: cholera ignem: melancholia terram: phlegm aquam: et sunt quatuor humores, sicut elementa, quae conservant corpora nostra. Sanguis ex Graeca etymologia vocabulum sumpsit, quod vegetet et sustenet et vivat. Cholera Graeci vocaverunt, quod unius diei spatio terminetur: unde et cholera, id est, fellicula nominata est, hoc est, fellis effusio...Melancholia dicta eo, quod sit ex nigri sanguinis fece...Graeci enim melan nigrum vocant, fel autem cholen appellant. Sanguis Latine vocatus, quod suavis sit: unde et homines, quibus dominatur sanguis, dulces et blandi sunt: phlegma autem dixerunt, quod sit frigidum: Graeci enim rigorem phlegmona appellant: ex his quatuor humoribus (ut diximus) reguntur sani, ex ipsis laeduntur infirmi." W.C. Curry (Chaucer and the Medieval Sciences, p.9) quotes Skeat, a famous Chaucerian scholar, as saying that the whole system of medieval medicine rested on the teaching of Galen in respect to the relation of bodily humors to sickness and health.

This theory of humors is interesting - not only for its classical origin, but also for the fact that it reveals a physiological cause for disease. It also shows that the condition of the entire body, as well as that of the separate organs, was considered an important factor in disease. The urine also indicated the state of health: "Urine is so-called because it is gathered from the kidneys (renes). By its analysis both the health and future sickness is shown."²² In regard to spiritual causes of disease which were also cited by Raban, "Certain diseases derive their names from their own causes...fever...delirium..."²³ Another example of the association of disease with spiritual weakness is found in his statement that "the weakness of the limbs is a weakness of the mind..."²⁴ Raban divided all general diseases into two types:

Acute sufferings come from the blood or from bile. The Greeks call these ills oxea. Yet older ailments precede from phlegm and melancholia which the Greeks called chronia. An oxea is an acute disease which passes rapidly or kills quickly as pleurisy or delirium. Among the Greeks oxy means acute and swift. A chronia is a disease of the body which lingers as gout or consumption. Among the Greeks time(tempus) is called chronia.²⁵

22. De Univer VI, 1. "Urina autem dicta, sive quod urat, seu quia ex renibus egeritur: cujus iudicio et salus et aegritudo futura monstratur."

23. Ibid. XVIII, 5. "Quaedam passiones ex propriis causis nomina acceperunt. Febris...Phrenesis..."

24. Loc. cit. "Infirmitas significat impossibilitatem mentis..."

25. Loc. cit. "...ex sanguine autem et felle acutae passiones nascuntur, quas Graeci oxea vocant: phlegmate vero et melancholia veteres causae procedunt, quas Graeci chronia dicunt. Oxea est acutus morbus, qui aut cito transit aut celerius interficit, ut pleuresis, phrenesis: axi (oxy) enim acutum apud prolixus corporis morbus, qui multis temporibus remoratur, ut podagra, tsis (phthisis): chronos apud Graecos tempus dicitur."

Again the indirect influence of Greek thought on ninth century medical theories is apparent. This classification of acute and chronic diseases has survived to the present time.

The spiritual attitude of Alcuin, the great Carolingian educator, toward general disorders, is interesting:

We thank Jesus Christ wounding and healing, chastizing and consoling. The pain of the body is the health of the soul, infirmity is temporal, and health everlasting...²⁶

A theory of the general art of curing was elucidated by Raban. "The path between health and disease, however, is healing, but, unless it is suitable to the disease, it does not lead to health."²⁷ The recognition of the necessity of differentiation of remedies is revealed in this passage. A similar idea was brought out by Alcuin: "There are certain illnesses which are treated better by sweet potions than by bitter, and certain maladies which are better treated by bitter than by sweet."²⁸ Halitgarius, bishop of Cambrai, illustrated the same concept:

For doctors compound various medicaments for the body so that they cure wounds with one, disease with another, tumors with another, and decayed flesh with another... and fractures with another.²⁹

26. Alcuini, Epist. XXXII. "Gratias agamus Deo Jesu, vulneranti et medenti, flagellanti et consolanti. Dolor corporis salus est animae, et infirmitas temporalis, sanitas perpetua."

27. De Univer., XVIII, 5. "Inter sanitatem autem et morbum media est curatio, quae nisi morbo congruat, non perducit ad sanitatem."

28. Epist. XXXVI. "Sunt quaedam infirmitates quae melius (dulcioribus medicantur potionibus quam amaris, et quaedam quae melius) amarioribus quam dulcibus."

29. Liber Poenitentialis. "Nam et corporum medici diversa medicamenta componunt: ut, aliter vulnera, aliter morbum, aliter tumores, aliter putredines... aliter confractiones..."

[Patrol. lat., CX, 706, 707.]

Theodulfe, Bishop of Orleans, was familiar with the old adage "similar things are cured by similar things and contrary things are cured by contrary things."³⁰ Hence, the concept of the necessity of discrimination in the application of remedies seems to have been prevalent.

For general remedies the term used was remedium;³¹ while cura³², medeor,³³ and medico³⁴ designated the cure itself. These remedies were surgery, bleeding and various medicines. That some form of surgery was practiced is illustrated by Raban's account of the plant mandrake (mandragora):

It is called mandragora because it has sweet-smelling apples the size of the Matian apples, and for this reason the Latins call it the apple of the earth. The poets call this anthropomorphous because it has a root that looks like a man; its bark mixed with wine is given for drink to those whose body must be cut for healing so that, sleeping, they may not feel pain...The mandrake, on account of its many medicinal qualities is compared to the virtues of the saints.³⁵

30. Ch. Cuissard, Theodulfe, Eveque d'Orléans, Sa Vie et Ses Oeuvres, p. 253. "Similia similibus curantur et contraria contrarius sanantur." Cuissard seems to have made a thorough study of the edited and unedited manuscripts of Theodulfe; however, he did not give his source for this information.

31. Halitgarius, Liber Poenit.; Lupus Epistolae, LXXII.

32. Raban., De Univer., XI, 1; XVIII, 5; Benedictus, Regula Sancti Benedicti. (Patrol. Lat., CIII, 639.)

33. Raban., De Univer., XI, 1; XVIII, 5.

34. Dungali, De Artibus Liberalibus. (M. G. H. Poet., I, 408)

35. De Univer., XIX, 8. "Mandragora dicta, quod habeat mala suave olentia in magnitudinem mali Matiani: unde et eam Latini malum terrae vocant. Hanc poetae anthropomorphon appellant, quod habeat radicem formam hominis simulantem, cujus cortex vino immista ad bibendum datur iis quorum corpus propter curam secandum est, ut soporati dolorem non sentiant...Mandragora propter multimoda medicaminum genera sanctorum virtutibus comparatur." It is interesting to note that the Romans of the Silver Age used mandrake for a similar purpose. Cf. Plinius, Historia Naturalis, XXV, 13. Today mandrake is used as a laxative known as podophyllum. Cf. M.E. Bimbinet, Recherches sur l'Origine et l'Evolution de l'Enseignement et de la Pratique de la Médecine d'Orléans, p. 197.

The use of mandrake as an anesthetic is clear from this passage.³⁶ Apparently a simple form of surgery, bleeding, was widely used for therapeutic purposes. In the infirmary at the palace of Charlemagne, Alcuin described a medical student performing an operation of bleeding: "Soon the medical students hasten to halls Hippocratic in crowds: One is opening a vein..."³⁷ There was a particular room devoted to bleeding at the famous hospital of the monastery of Saint Gall.³⁸ Theodulfe mentioned bleeders,³⁹ and throughout the Middle Ages it was customary for monks to be bled at certain intervals for the benefit of their health.⁴⁰ Hence, it seems that bleeding was a sort of prophylactic measure. Bleeding was followed by a post-operative treatment. According to Walafrid,

"...Still the doctors I'm told
Advise that their patients when heavily bled
On ambrosia tea should be nourished and fed."⁴¹

Probably bleeding was usually succeeded by a purgative in the form of a decoction or an infusion. It is clear that purging

36. It is interesting to compare the evidence furnished by Raban, with Bimbinet's statement that the science of surgery was younger in France than that of medicine, and that at the University of Paris surgeons were excluded because of the fact that the church abhorred blood.

37. Carmina, XXVI. (Patrol. lat., CI, 781). "Accurrunt medici mox Hippocratis secta, hic venas rudit..."

38. Cr. infra, p. 166, for a plan of the infirmary of Saint Gall.

39. Cuissard, op. cit., p. 253.

40. Leo, R.A. Suppan, "Monastic Dispensaries of the Middle Ages", Journal of American Pharmaceutical Association, IV(1915), 390.

41. Walafridus Strabus, De Cultura Hortorum, XXIII.

"Medici tamen arte suapte
Hanc utcumque colunt, tantum quae sanguinis hausta
Absumit, quantum potus ingesserit almi."

Ambrosia tea is used today to moderate discharges of blood. Suppan, op. cit., p. 390.

was associated with bleeding, for the same room (cella pro sanguine minutis or pro potionatis) was provided for the two at the monastery of Saint Gall.⁴²

Both physical and spiritual medicines were mentioned. Those of physical character were drugs, wine, unguents and waters. For these the terms medicina,⁴³ medicamentum⁴⁴, medicamen⁴⁵, and pigmentum⁴⁶ were used. Varied were the drug remedies employed. Probably every monastery had its own collection of recipes which were copied from ancient writers; in application of these there were prayers or rubrics where prayers were to be said.⁴⁷ Against pagan rubrics Halitgarius definitely warned his readers:

It would not be permitted in collecting medicinal herbs to turn one's attention to certain observations or incantations unless for such a reason that God and the Lord be honored with a divine symbol and sacred speech suited to God.⁴⁸

It has also been said that monks applied fanciful names connected with sacred history to their medical concoctions.⁴⁹ Raban described the herb casia which was used in medicines: "Casia grows in Arabia...it is very like cinnamon in quality but inferior in power; for this reason it is added to medicines in place of cinnamon in double weight."⁵⁰

42. Cf. infra, p. 144

43. Raban., De Univer., XVIII, 5; Rimburtus, Vita Sancti Anskarii, c. XXXIX.

44. Raban., op. cit., XVII, 1; XIX, 7.

45. Ibid., XIX, 8.

46. Ibid., XVIII, 5.

47. Suppan, op. cit., p. 385.

48. De Poenitentia, IV, 26. "Non liceat in collectione herbarum, quae medicinales sunt, aliquas observationes, vel incantationes attendere: nisi tantum, cum symbolo divino et oratione Dominica, ut Deus et Dominus honoretur."

49. Suppan, op. cit., p. 392.

50. De Univer., XIX, 7. "Casia nascitur in Arabir...est autem virtute cinnamomo similis, sed potentia inferior: unde pro cinnamoni vice duplex ejus pondus in medicamentis admiscetur."

He also stated that a compound called aurichalcum was used in medicines: "...moreover it(aurichalcum) is made of bronze and fire and mixed with medicines for a golden color..."⁵¹ Trees were used medicinally. According to Rabanus, "This land (Parthia) produces medical trees which grow with difficulty in other regions."⁵² Alcuin referred to health-giving herbs (herba salutifera) at the monastery of Carmery: "All the meadows shall flower with health-giving herbs which the right hand of the doctor plucks for the work of healing."⁵³ Walafrid mentioned a number of herbs possessing general curative properties. In reference to the rose (rosa) he said,

"From its petals a marvelous oil one distills
Which is useful for no one knows how many ills."⁵⁴

Sage (salvia) was a cure-all:

"For so many an ailment it offers relief,
It deserves to rejoice in an evergreen leaf."⁵⁵

51. De Univer., XVII, 14. "...fit autem ex aere et igne multo, ac medicaminibus perducitur ad aurem colorem."

52. Ibid., XII, 4. "Hujus terra medicam arborem gignit, quam alia regio minime parturit."

53. Elogium. (Patrol. Lat. CI, 1415)

"Prata salutiferis floreant omnia et herbis,
Quas medici quaerit dextra salutis ope."

54. De Cultur. Hortor., XXVI.

"...inficit hic oleum proprio de nomine dictum,
Quod quam saepe fiat mortalibus utile curis..."

Preparations from rose leaves have varied medical uses today.

55. Ibid., IV.

"...Pluribus haec hominum morbis prodesse reperta
Perpetuo viridi meruit gaudere iuventa."

Sage is often used today, especially for sore throat, ulcers of the mouth and hectic fever.

Rue (ruta) also had wide therapeutic powers:

"And its power to cure all diseases is such..."⁵⁶

For general healing the poet recommended lovage (levisticum):

"Still, when mixing your herbs in a potion to heal,
Add a few seeds of lovage-their praise it will steal."⁵⁷

One of the less used herb remedies was clary:

"...it is rarely employed
And the doctors I find, almost seem to avoid
The use of it."⁵⁸

The use of wine, unguents and waters as remedies is frequently mentioned. In regard to wine (vinum) Halitgarius said, "Some take wine for the health of the body..."⁵⁹ Probably Alcuin used wine as a medicine.⁶⁰ Even the pious Raban found biblical justification for the medical use of wine by citing Paul's advice to Timothy to "use a little wine for thy stomach's sake and thine often infirmities."⁶¹ In reference to unguents (unguentum), Raban said that some were imported: "From which

56. De Cultur. Hortor., V. "Haec cum multiplici vigeat virtute medellae..." Rue is used for a variety of ailments today.

57. Ibid., XIII.

"...Semina saepe tamen quaesitis addere curis
Parva solet, famamque aliena laude mereri."
Lovage is also widely used as a remedy today.

58. Ibid., XVIII. "...quae quamvis rarius ulli,
Quaesita auxilio medicorum paene putetur
Effugisse manus..."

59. De Poenit., V, 15. "...sed tamen pro corporis salute percipiunt." The value of wine as a tonic is recognized today.

60. C.J.B. Gaskoin, Alcuin, his life and his work, p.245. Gaskoin gives no references to a source for this information.

61. De Univer., XVIII, 5. "Et Paulus apostolus Timotheo modicum vinum prodesse dixit." Cf. I Timothy V, 23.

(India) the ointments for the body and the hair come..."⁶²
 Theodulfe also referred to unguents.⁶³ The general use of
 curative waters is exemplified by Rabanus' statement that "There
 is in Judea a lake more healthful than other lakes and more
 efficacious for curing bodies."⁶⁴

In consideration of general spiritual remedies
 one finds that supplication for healing to Saint Martin of
 Tours was still a resort of the faithful. One of Alcuin's
 letters to Charlemagne illustrates this point: "May it be allowed
 to me to spend some time every day with Saint Martin...because
 I am infirm of body and am not able to finish my journey and my
 work."⁶⁵ Charlemagne's secretary, Eginhard, mentioned a man
 who "In that illness, having been carried to Tours, prayed to
 the memory of Saint Martin."⁶⁶ Raban connected ointments with
 divine medicine, referring to "the yellow ointment or clay of
 celestial medicine..."⁶⁷ He also alluded to rosin(resina) as
 a celestial medicine.⁶⁸

62. De Univer. XII, 4. "Unde primum crinium et corporum
 unguenta venerunt..." Unguents also have varied medical uses today.

63. Cuissard, Théod., Evêque d'Orléans, p. 253.

64. De Univer., XI, 8. "Est autem in Judaea omnibus
 lacis salubrior et ad sanitatem corporum quodam modo efficacior."

65. Epist., CXXXIV. "Quod ut meam liceat apud sanctum
 Martinum quotidie instantiam agere....quia valde infirmatus
 corpore nil aliud itineris vel laboris perficere valeo."

66. Annales, An. 768. "In ipsa tamen valitudine Turonos
 delatus, apud sancti Martini memoriam oravit."

67. De Univer., XII, 1. "Lutum medicinae coelestis
 glutinum..."

68. Ibid., XVIII, 5.

A definition for health was propounded by Raban:

Health is the unimpaired condition of the body and it is tempered by heat and moisture which is in the blood. From this fact health is determined by the status of the blood.⁶⁹

A variety of terms- salutus⁷⁰, sanus,⁷¹ sanitas,⁷² valetudo,⁷³ sanatus,⁷⁴ salubrior,⁷⁵ and saluberrimus,⁷⁶ were used to connote health.

The specific diseases of the Carolingian period can be grouped as contagious and non-contagious. The work Concerning the Universe (De Universo) of Raban is the best source for theories of disease, while the poem On the Cultivation of Gardens (De Cultura Hortorum) of Walafrid gives more information on remedies. Valuable material on diseases is also obtainable from the other Carolingian sources. For contagious diseases the general terms used were pestilentia,⁷⁷ lues,⁷⁸ contagium,⁷⁹

69. De Univer., XVIII, 5. "Sanitas est integritas corporis et temperantia ex calido et humido, quod est sanguis: unde et sanitas dicta est, quasi sanguinis status."

70. Loc. cit., Alcuin., Elogium (Patrol. lat., CI, 1415) Versus De Sanctis Euboricensis Ecclesiae (Patrol. lat., CI, 820); Dungal., De Art. Liberal. (M.G.H. Poet., I, 408); Anon., Annales Xanthensis, An. 845.

71. Raban., De Univer., VI, 1; XVIII, 5; Walafrid., De Cultur Hortor., XXIV; Theodulf, Carmina I.

72. Raban., De Univer., XI, 8; XVIII, 5.

73. Egin., Vit. Karol., c. XXII; Annal., An. 768.

74. Alcuin., Capitula, XXX.

75. Raban., De Univer., XI, 8.

76. Ibid., XII, 4.

77. Eginhardi, Annales, An. 820 and An. 822.

78. Dungal., De Artibus Liberalibus (M.G.H. Poet., I, 408); Eginl., Vita Sancti Sturmi, XXV.

79. Anon., Regionis Chronicon, An. 854.

pestis,⁸⁰ plaga,⁸¹ and pestifera.⁸² The specific terms found for these diseases were dissenteria⁸³ and venter incommodus⁸⁴ for dysentery; plaga magna vesicarum⁸⁵ and ignis coelestis⁸⁶ for ergotism; leprae⁸⁷ and leprosi⁸⁸ for leprosy; and febris for fever.⁸⁹ For the non-contagious disorders the specific terms employed were insania for insanity;⁹⁰ furialis⁹¹ and lymphaticus⁹² for madness; phrenesis for delirium;⁹³ comitales for epilepsy;⁹⁴ contusio laxix membris,⁹⁵ paralysis,⁹⁶ and paraliticus,⁹⁷ for paralysis; unda diffusa sanguinis for apoplexy;⁹⁸ tenebrae,⁹⁹ caecus,¹⁰⁰ and umbra oculis¹⁰¹ for blindness; lippus oculis¹⁰² or

80. Eginhardi, Annales, An.820

81. Anon., Annales Xanthenses, An.857.

82. Anon., Regionis Chronicon.

83. Rimburtus, Vita Sancti Anskarii, c.XL.

84. Eginhardi, Annales, An.820.

85. Anon., Annales Xanthenses, An.857.

86. Raban. Maurus, De Universo, XII,4.

87. Ibid., XVIII,5.

88. Ibid., VI,1; XVIII,5; Capitulaire Generale, An.789.

89. Egin., Annal., An.758, An.829; Epistolae, XXV; Vita Karoli, c.XXII,XXX; Alcuini, Epistolae,C; Walafrius De Cultura Hortorum, VI,IX.

90. Raban., De Univer., XI,1.

91. Loc.cit.

92. Ibid., XI,1.

93. Ibid., XVIII,5.

94. Ibid., XVII,1.

95. Walafrius., De Cultur. Hortor., XV.

96. Alcuini, Versus De Sanctis Euboricensis Ecclesiae.

97. Raban., De Univer., XVIII,3,5; Alcuini, Capitula,XXX.

98. Walafrius., De Cultur. Hortor., XIV.

99. Ibid., XIII.

100. Raban., De Univer., XI,10.

101. Walafrius., De Cultur. Hortor., XI.

102. Raban., De Univer., XVIII,5.

merely lippus¹⁰³ for blear eyes; surdus for deafness; auris¹⁰⁴
abscissa for split ear; tumor ventris¹⁰⁵ for ulcer of the stomach;¹⁰⁶
nausia for nausea; dolor ventris¹⁰⁷ for stomach ache;¹⁰⁸
stomachus morantus¹⁰⁹ and venter mora¹¹⁰ for constipation; podagra,¹¹¹
dolor pedum,¹¹² morbus pedum,¹¹³ and uno pede claudico¹¹⁴ for
gout; dolor vesicae for bladder disease;¹¹⁵ aegrus pectoris for
pain in the heart;¹¹⁶ hydropicus for dropsy;¹¹⁷ dolor renium
for kidney disease;¹¹⁸ raucedo fauce for hoarseness in the throat;¹¹⁹
tussim for cough;¹²⁰ anhela for asthma;¹²¹ pleurisia for pleuri-
sy;¹²² tissis for consumption;¹²³ vulnus for wound;¹²⁴ claudus
for lameness;¹²⁵ gripperosus for hunch back;¹²⁶ lingua abscissa

103. De Univer., XVIII, 5.

104. Loc. cit.

105. Loc. cit.

106. Walafrid., De Cultur. Hortor., XI.

107. Ibid., XX.

108. Ibid., XII, XIV, XXII.

109. Ibid., XIX.

110. Ibid., XVII.

111. Raban., De Univer., XVIII, 5; Anon., Fabula Podagrae et Pulicis.

112. Egin., Epist., XXVII; Annal., An. 813.

113. Egin., Epist., XXVIII.

114. Egin., Vit. Karoli, XXII.

115. Walafrid., De Cultur. Hortor., XII.

116. Ibid., X.

117. Raban., De Univer., XVIII, 5; Halitgarius, De Poenitentia, I, 12.

118. Egin., Epist., XIV.

119. Walafrid., De Cultur. Hortor., XVIII.

120. Ibid., XI, XXV.

121. Ibid., XI.

122. Raban., De Univer., XVIII, 5; Egin., Vita Karoli, c. XXX.

123. Raban., De Univer., XVIII, 5.

124. Walafrid., De Cultur. Hortor., XV, XXII, XXIV; Raban., De Univer., XI, 1; XVIII, 5; Anonymi, Liber Poenitentialis.

125. Raban., De Univer., XVIII, 5.

126. Notker I, Gesta Karoli, II, 12.

for rent tongue;¹²⁷ manus fracta for crushed hand;¹²⁸ nasus tortus for twisted nose;¹²⁹ testiculus confractus;¹³⁰ for broken testicles; tricae torquentae for stricture;¹³¹ aestus solis for sunstroke;¹³² venenum for poison;¹³³ impetigo¹³⁴ and scabies¹³⁵ for scabby eruptions; carbunculus pectore for a carbuncle of the chest;¹³⁶ pustula dextro inguine for a tumor in the right groin;¹³⁷ dolor capitis for headache;¹³⁸ vertigo for vertigo;¹³⁹ abortus¹⁴⁰ and abortio¹⁴¹ for abortion; and sterilitas¹⁴² and sterilus¹⁴³ for sterility.

In the consideration of contagious diseases, one finds that there are several accounts of diseases which seem to have been dysentery. Eginhard mentioned a fearful pestilence in 820: "...the army in upper Pannonia was affected from the unhealthfulness of the water by disturbance of the bowels. A large number were consumed by this disease."¹⁴⁴ Both the fact

127. Raban., De Univer., XVIII,5.

128. Loc.cit.

129. Loc.cit.

130. Loc.cit.

131. Walafrid., De Cultur. Hortor., XX.

132. Ibid., XIX.

133. Ibid., X,XV.

134. Raban., De Univer., XVIII,5.

135. Loc.cit.

136. Walafrid., De Cultur. Hortor., XVI.

137. Lupus, Epistolae, VIII.

138. Ibid., LXV; Walafrid., De Cultur. Hortor., IX.

139. Walafrid., De Cultur. Hortor., IX.

140. Raban., De Univer., XI.

141. Ibid., VI,1; Lex Alamannorum Karolina, XCI.

142. Raban., De Univer., XI,1.

143. Loc.cit.

144. Annales, An.820. "Is tamen, qui per Pannoniam superiorem...ex locorum et aquarum insalubritate soluti ventris incommodo graviter affectus est, et pars eius non modica hoc morbo consumpta est."

that this plague occurred in Pannonia which had a malarial climate, and that it was a disease troublesome to the bowels, indicate that it was probably dysentery. It is noteworthy that Eginhard attributed the epidemic to a physical, factor - "unhealthiness of the water."¹⁴⁵ Rimbart in his Life of Saint Anskarius (Vita Sancti Anskarii) described the suffering of Anskarius¹⁴⁶ from dysentery:

"...When he had been bishop for 34 years, he began to suffer from a disease of the body called dysentery; it was from this he was ill for many days, even for four months and more. And since he thought he was going to die he gave thanks to God and said that the sickness was less than he deserved. He uttered the words of the blessed Job, "If we have received our blessings from the hand of God, why do we not also bear the evils?"¹⁴⁷

Apparently Rimbart thought that Anskarius' dysentery was a direct punishment from God for sin. If the account of the resignation of Anskarius toward his plight is authentic, his attitude

145. Today it is thought that water is one of the sources of infection for amoebic dysentery.

146. Anskarius (b.in Picardy in 801, d.in 865) was a Frankish missionary to Denmark and Sweden. He was a successor of Ebbo of Rheims.

147. Rimbartus, Vita Sancti Anskarii, XL. "...episcopatus vero trigesimo quarto, gravi coepit corporis morbo laborare, dissinteria scilicet iugi, qua cum per multos dies mensibus videlicet quatuor et eo amplius, acriter laboret, et se ad mortem urgeri sentiret, semper Deo gratias agebat, minoremque ipsum laborem esse dicebat, quam sua mereretur iniquitas, illud beati Iob saepius decantans: Si bona suscepimus de manu Domini, quare mala non sustineamus?" Since there is no allusion to a plague in this passage, Anskarius may have suffered from chronic dysentery or from diarrhea.

is indeed remarkable.

The anonymous chronicler of the Annals of Xanthén (Annales Xanthenses) described a calamitous plague on the upper Rhine which seems to have been ergotism:

A great plague characterized by swollen bladder befell the people and consumed them with a dreadful rot to such a degree that their limbs wasted and fell off before death.¹⁴⁸

Raban used the term ignis coelestis which ordinarily designated this malady, in a reference to a plague in the land between Arabia and Palestine.¹⁴⁹

Leprosy exacted a heavy toll from the Carolingian Franks. The cause of this repulsive malady was cited by Raban: "Leprosy is caused by the false and varied doctrines of heretics or the infidelity of the Jews or the contamination of sinners."¹⁵⁰ This writer even classified the types of leprosy, dividing it into nine kinds based on the particular types of sins of the victim:

There is a leprosy of the whole body, that is those who have mingled their own blasphemy with the scripture. There is a swelling leprosy inflated by pride. There is a deflated leprosy imitating the heart or caused by blasphemy. There is a red leprosy caused by the wrath of the heart. There is the white leprosy

148. For a detailed discussion of this disease, cf. supra, pp. 15-19. Anon., Annales Xanthenses, An 857. "Plaga magna vesicarum turgentium grassatur in populo, et detestabili eos putredine consumpsit, ita ut membra dissoluta, ante mortem deciderent."

149. Raban Maurus, De Universo, XII, 4.

150. Ibid., XVIII, 5. "Lepra est doctrina haereticorum falsa atque varia, vel Judaeorum infidelitas, sive contaminatio peccatorum..."

of hypocrisy. Leprosy in the home is infidelity in the whole life. Leprosy in the garment indicates the vice of the flesh. Leprosy alive in the flesh is sin in the soul. Temporary leprosy is any vice you please producing an abundance of seed from itself- the kinds are numberless. An example is nocturnal emissions which represent the hidden thoughts of wicked men. Another example is a menstruating woman whose soul is polluted by unclean thoughts...The flow of blood is the profusion of sins.¹⁵¹

Several methods of treatment for leprosy were employed during this period. The most important of these was segregation; two Carolingian capitularies show that this was enforced by legislation. In the general capitulary of 789 (Capitulaire Generale) there was a provision "concerning lepers, that they do not mingle with other people."¹⁵² The same decrees

151. De Univer., XVIII,5. "Leprosi toto in corpore, id est, qui et supra blasphemiam suam in omnem scripturarum seriem permiscentes: lepra tumens, inflata superbia: lepra humilis, simulatio cordis, vel latens blasphemia: lepra rubens iracundia cordis: lepra alba est hypocrisis. Lepra in domo infidelitas est tota in plebe. Lepra in vestimento significat vitia carnis. Lepra in carne viva, peccata sunt in anima. Lepra volatica, vitium quodlibet: ex se generans profluvium seminis, immoderata est locutio: nocturna pollutio, peccatorum occulta cogitatio est. Mulier menstrua, anima est immundis cogitationibus polluta...Fluxus sanguinis, est profusio peccatorum." There is no modern counterpart for Raban's nine varieties of leprosy.

152. Capitulaire Generale, An.789, XX. "De leprosis, ut se non intermisceant alio populo."

appeared in the great Carolingian capitulary (Karoli Magni Capitularia)¹⁵³ Not only were there laws in regard to the isolation of lepers but, according to Raban, there were also definite stipulations for their cleanliness:

Through the law concerning the cleansing of the leper, the hairs of the head, the beard and the eyebrows, and every hair that grows on the body was ordered to be torn out by the roots.¹⁵⁴

The enforcement of such a stringent decree for the purification of lepers as that mentioned by Raban seems doubtful. According to Neuberger, unguents were effectively used for lepers by Iso (c.871), a monk at the monastery of Saint Gall: "Having been taught many things when he had learned how to make ointments, he cured lepers..."¹⁵⁵

The Carolingian Franks suffered from divers types of fevers. In regard to the cause of fever, Raban said, "Certain diseases derive their names from their own causes. Fever is named from fervor, and there is indeed an abundance of heat in fever."¹⁵⁶ Carrying this idea further, the same author said,

153. Karoli Magni Capitularia, 23,36.

154. De Univer., VI,1. "...ubi per legislatorem in mundatione leprosi radi jubentur capilli capitis, barbaeque et supercilia, et omnis pilus qui in corpore est."

155. Neuberger, Geschichte der Medizin, II,pt.2,p.272 "...ubi plurima doctus, cum unguenta quidem facere nosset, leprosos..." Neuberger does not give a reference to his source of information. J. M. Clark (The Abbey of Saint Gall, p.124) mentioned Iso's healing a blind man with his ointments, (Neuberger referred to his having healed a blind man in the last of the quotation given above), giving as his source Ekkehard, Casus, c.XXXI. Only a fragment of Ekkehard's work appears in the Monumenta Germaniae historica edition, so it has been impossible to verify this reference. In regard to the remedy itself, it is interesting that today chaulmoogra and gurjun oil are recommended for leprosy; possibly the ointment used by Iso contained an oil of this nature.

156. De Univer., XVIII,5. "Quaedam passiones ex propriis causis nomina acceperunt. Febris a fervore dicta: est enim abundantia caloris."

"Fever is a lust of the flesh, insatiably ardent, as in the gospel, Matthew says figuratively that the mother-in-law of Peter suffered from fever."¹⁵⁷ In 800 Alcuin complained in a letter written to Charlemagne, of a distressing fever (improba febris) which rendered him incapable of travel: "This dreadful fever with great difficulty permits me to live in the land and yet you wish me to go on a sacred mission."¹⁵⁸ Charlemagne's biographer, Eginhard, said that the emperor "had good health, but for four years before his death was frequently attacked by fevers..."¹⁵⁹ Eginhard himself was troubled with a fever in 833. In a letter written to Louis the Pious¹⁶⁰, he declared, "...I was ill and suffering from a fever as I am still."¹⁶¹ According to Professor J. W. Thompson, Charles the Bald¹⁶² died on October 5, 877, of a fever which he may have contracted in Italy; yet it

157. De Univer., XVIII, 5. "Febris est carnalis cupiditas, insatiabiliter ardens, sicut in Evangelio socrum Petri figuratim febricitantem dicit."

158. Epistolae, C. "Vivere me terris vix vix sinit improba febris, et me coeleste scandere vultis iter."

159. Eginhardi, Vita Karoli, c. XXII. "...valitudine prope, praeter quod antiquam decederet, per quatuor annos crebro febribus corripiebatur..." The long duration of these fevers indicate that they were possibly malarial.

160. Louis the Pious was the youngest son of Charlemagne. On account of the death of his two older brothers he succeeded his father as Holy Roman Emperor, ruling from 814 to 840.

161. Epistolae, XXV. "...infirmus eram et febribus laborabam, sicut adhuc facio."

162. Charles the Bald was Carolingian king of the Franks from 843 to 877.

was whispered that the powder in the medicine given him by a Jewish doctor was poison.¹⁶³

Several remedies were mentioned for fevers. Alcuin offered an alternative to the sacred mission by suggesting to Charlemagne that he be allowed to try a remedy for his fever: "He (Christ) has made me to seek herbs through the fields and green hills that I may have good health."¹⁶⁴ Alcuin's excuse that Christ had told him to indulge in a day in the hills gathering medicinal herbs is rather amusing.¹⁶⁵ However, the passage reveals a sensible interest in health; Alcuin not only actually chose to roam in the woods rather than go on a holy errand, but he also admitted his preference. Wormwood(absinthium) was considered preeminent in the treatment of fevers by Walafrið. He wrote enthusiastically of this herb.

"For expelling a fever or quenching a thirst
Undoubtedly wormwood of herbs is the first."¹⁶⁶

Another herb was mentioned by Walafrið for fever. In speaking of santhem wood (abrotanum), he said, "It reduces a fever..."¹⁶⁷

163. Thompson, Mid.Ages, I, 296. Thompson does not support this information by adequate historical evidence.

164. Epist., C. "Per campos, colles, herbas et prata, virentes quaerere suggessit dum mihi chara salus."

165. Activity would certainly be harmful to one with high fever. It is impossible to estimate the value of the herb remedy since the name of the herb is not mentioned. The herb sage would be beneficial for hectic fever.

166. Walafriðus Strabo, De Cultura Hortorum, IX. "...Ferventem domuisse sitim, depellere febres hoc solet auxilium clara virtute probatum."

167. Ibid., VI. "Febribus obstat enim..."

Contemporary writers described a few plagues in general terms. Eginhard referred to a plague of the year 820 which spread widely through the kingdom of the Franks:

This year on account of the continuous rains, and the very damp air, a great misfortune befell the people for there was a pestilence of men and of beasts so great and of such wide scope that scarcely any part of the whole kingdom of the Franks can be found immune and untouched by the disaster.¹⁶⁸

In this passage the cause ascribed by Eginhard is significant: he thought that a physical element - climatic conditions - was responsible for the plague. Eginhard reported an equally disastrous epidemic in the year 829. It was preceded by such portents as fire, earthquake, damp air, hail, stones of great weight, and lightning.¹⁶⁹ In the words of the chronicler, "There followed a great pestilence and mortality of men which spread throughout Francia. It consumed a numberless multitude of men of both sexes and ages."¹⁷⁰ According to the hagiographer,

168. Eginhardi, Annal., An. 820. "Hoc anno propter iuges pluvias et aerem nimio humore resolutum magna incommoda contigerunt. Nam et hominum et boum pestilentia tam inmane longe lateque grassata est, ut vix ulla pars totius regni Francorum ab hac peste immunis atque intacta possit inveniri."

169. Ibid., Annal., An. 823. "...igne coelesti concrematae, et fulgora sereno atque interdiu de coelo cadentia. Et in multis regionibus fruges grandinis vastatione deletae, atque in quibusdam locis simul cum ipsa grandine veri lapides atque ingentis ponderis decidere visi; domus quoque de coelo tactae, hominesque ac caetera animalia passim fulminum ictu praeter solitum crebro exanimata dicuntur."

170. Loc. cit. "Secuta est ingens pestilentia atque hominum mortalitas, quae per totam Franciam inmaniter usquequaque grassata est, et innumeram hominum multitudinem diversi sexus et aetatis gravissime saeviendo consumpsit."

Egil, Saint Sturmus suffered from a plague (lues).¹⁷¹ Alcuin mentioned some sort of treatment which was attempted by doctors for plagues:

We read in the histories of secular literature that certain men skilled in the medical art, when they heard that some states were afflicted by a pestilence, were influenced by their love of the citizens; they planned a particular kind of medicine in their anxiety by which they might protect their citizens from the infection of this dire disease lest this awful danger should unexpectedly carry off a part of their kinsmen...¹⁷²

In his poem on the liberal arts (De Artibus Liberalibus), Dungali also said that the medical art was able to check pestilence and drive it far away.¹⁷³

The Carolingian Franks also seem to have suffered from a heterogeneous assortment of non-contagious diseases. Varied types of mental disorders were mentioned by contemporary writers. Epilepsy (epilepticitium), delirium (phrensis), madness, depression, necessitating forgetfulness, and general

171. Vita Sancti Sturmi, c.XXV.

172. Alcuini, Epistolae, (This reference came from Laforet's Histoire d'Alcuin, p.132; he does not give the number of the letter, and I have been unable to locate it.) "Legimus in saecularis litteraturae historiis, quosdam viros medicinalis artis peritos, dum aliquas civitates pestilentiae infectas audierunt, amore civium suorum, aliquod medicamenti genus provida sollicitudine excogitasse quo cives suos a grassantis morbi infestatione praemunirent, ne ingruens periculum ex insperato partem cognatae subverterit multitudinis."

173. Dungali, De Artibus Liberalibus, IX. (M.G.H., Poet., I, 408*. "Haec sorbere lues, longe et depellere pestes...")

inertia (languor) were current. Causation for depression, inertia, delirium and madness was considered by Raban. He asserted that one is depressed when wicked thoughts incessantly fills his mind."¹⁷⁴ In this passage one notes a spiritual factor - "wicked thoughts" - as the cause of depression. A spiritual explanation was also given for inertia: "Languor is a disease of the corrupt as one reads in Exodus: 'If you observe my precepts, I will not bring to you the languor which I have brought to Egypt.'"¹⁷⁵ Raban included delirium among diseases whose etymology could be traced to their own causes, saying, "Certain diseases derive their names from their own causes...phren^esis or delirium is so-called from an impediment of the mind because the Greeks called mind phrenesis or because insane people gnash their teeth (infrendant dentibus)."¹⁷⁶ The association of delirium with a natural cause- "an impediment of the mind" - in contrast with attributing depression to a spiritual factor is significant. It is also apparent in this passage that Greek thought influenced the terminology of Raban. One entirely physical cause was mentioned by this writer: "The Boeotian lake brings madness...In Ethiopia he who drinks from the Red Spring becomes mad."¹⁷⁷

174. De Univer., XVIII, 5. "Ponderosus est, quem prava cogitatio indesinenter gravat in mente."

175. Loc. cit. "Languor est vitiorum morbus..." Cf. Exodus, XV, 26.

176. Loc. cit. "Quaedam passiones ex propriis causis nomina acceperunt...Phrenesis appellata, sive ab impedimento mentis: quia Graeci mentem phrenas vocant; seu quod dentibus infrendant."

177. Ibid., XI, 1. "Boeotiae lacus furialis est...In Aethiopiae fonte rubro qui biberit, lymphaticus fit."

The only symptoms recorded for the mental disorders were the "gnashing of teeth" mentioned by Raban in reference to delirium and Alcuin's description of the disease of inertia. Concerning this latter disease, one reads in a letter from Alcuin to Charlemagne that he "was suffering from languor... drowsy, sluggish with the disease of inertia..."¹⁷⁸

Physical remedies were cited for epilepsy, madness, and depression. For epilepsy Raban described a fantastic concoction made from the sulphuric soil of Samos:

The earth that comes from Samos...is sticky and white, and it is useful for medicines and small vessels...There are four kinds of sulphur soil: one which is dug out and which alone of all the kinds doctors use... The strength of sulphur is so great that Anaxilaus checks epilepsy by its fumes and heated wines.¹⁷⁹

The physical character of this remedy for epilepsy is obvious. Whether or not sulphur from Samos was imported to Francia is

178. Epist., LXXXIV. "...dormientem. imo et inertiae morbo torpentem..."

179. De Univer., XVII, 1. "Terra Samia...glutinosa et candida, et linguae lenis, medicamentis et vasculis necessaria... Hujus genera quatuor: unum, quod foditur translucetque et viret, quo solo ex omnibus generibus medici utuntur...Sulphuris tanta vis est, ut morbos comitiales deprehendat nidore suo impositus ignibus Anaxilaus calicem vini..." The wine in this drink might act as a sedative in a mild epileptic convulsion; however, morphine is usually required in the average cases.

not clear from this passage. Certain waters had curative powers for the mentally unfit. According to Raban, "In Campania are waters which are said to remove...the insanity of men."¹⁸⁰ Depression could be benefitted by visiting a spring in Boetia, according to Raban, who said, "In Boetia are two springs; one brings memory; the other forgetfulness."¹⁸¹ Walafrid suggested the use of the drug poppy (papaver) for depression, saying,

The poppy, I fancy, recalls to our mind
How the goddess Demeter, unable to find
Persephone stolen, was stricken with grief
And anxious to gain for her thought some relief.
And so a decoction of poppy she drank,
And immediately into oblivion sank.

There are a number of references to paralysis in Carolingian sources. Several different forms were described. A man with a strange malady which seems to have been paralysis was mentioned by Halitgarius:

He was afflicted with a grave disease; for three days in succession he was without feeling or the use of his voice. Regaining consciousness and his voice, he sent his grandson to the elder...¹⁸²

180. De Univer., XI, 1. "In Campania sunt aquae, quae... virorum insaniam abolere dicuntur." The waters possibly had a good psychological effect on psychoses and neuroses.

181. Loc.cit. "In Boetia duo fontes, alter memoriam, alter oblivionem affert." De Cultur. Hortor., XVI. "Et Cereale quidem nugarum in parte papaver, hac memorare placet, quod raptu mesta puellae Mater, ut immensis optata oblivia mentem exuerent curis, fertur Latona vorasse." Opium comes from poppy, and its use for depression is well known today.

182. Lib. Poenitential., (Patrol. lat., CV, 709) "Qui tandem gravi morbo conflictatus, triduo deinceps omni sensuum et vocis usu caruit; et ad se reversus, vocisque compos factus nocte nepotem suum ad presbyterum misit..."

Walafrid referred to apoplexy (contusio laxis membris).^{183 119}
According to Thompson, Carloman¹⁸⁴ returned to Germany in 877
from Italy a hopeless paralytic.¹⁸⁵ The only cause cited for
paralysis was spiritual. Raban said that "Paralysis indicates
that the soul has been dissolved by vices..."¹⁸⁶

Varied remedies were described for paralysis.
The story of a supernatural cure was narrated by Alcuin:

The knight understood that there was something more out-
standing about that place, and setting an inscription
there he rode on. Coming to the hospital where he had
started, he found a girl lying there worn out with the
cold languor of paralysis, groaning out the last breath
of her wretched life. And while the household of her
father in great disturbance uttered groans, the guest
ordered her to be carried out where the horse had been
cured. Then the girl, placed on a wagon, was carried
along as the traveler had directed. She, lying on the
ground, slept for a little while. When she awoke she
perceived that her health had returned...¹⁸⁷

183. De Cultur. Hortor., XV.

184. Carloman (875-82) was the eldest son of Ludwig
the German; his father gave him Bavaria and the Slav dependen-
cies. After the death of Charles the Bald in 877, he was
elected king of Italy.

185. Thompson, Mid. Ages, I, 296. Thompson failed to
mention his source for this information.

186. De Univer., XVIII, 5. "Paralyticus significat
animam vitiis dissolutam..."

187. Versus De Sanctis Euboricensis Ecclesiae. (Patrol. lat., CI, 820)

"...Intellexit eques quicquam praestantius illo
Esse loco; titulem ponens equitabat ab inde
Hospitium veniens quo tenderat ecce puella
Tabita paralysis gelido languore iacebat,
Ultima con geminans miserae suspira vitae;
Cumque domus neptim patris turbata gemebat,
Suggestit hospes eam duci quo forte caballus
Sanatus fuerat; carroque imposta puella
Ducitur, ut iussit monstrans loca sancta viator,
Et sita corpus humi paulum dormivit ibidem
Evigilaneque suam persensit adesse salutem..."

Walafrid recommended a poultice of lily (lilium) for paralyzed limbs, saying,

Then the strength of the poultice will be understood,
For paralyzed limbs it is equally good.¹⁸⁸

The same poet advised taking chevril (cerfolium) to prevent apoplexy:

In addition, a taste of it serves
To prevent apoplexy and soothes throbbing nerves.¹⁸⁹

In this passage the mention of a prophylactic measure is noteworthy. It seems probable that the monk Iso of the monastery of Saint Gall cured paralytics by unguents.¹⁹⁰

Such diseases as blear eyes, soreness in the eyes, weakness of the eyes, and blindness afflicted the Carolingian Franks. Raban offered spiritual explanations for these maladies:

There is a soreness in the eyes of him who has a certain nature of intelligence...He is blear-eyed who is depressed by earthly lust, and does not allow himself to raise the eyes of his mind to a contemplation of the heavens...¹⁹¹

188. De Cultur. Hortor., XV. "...tum iam dinoscere vires Magnificas huiusce datur medicaminis ultro. Haec etiam laxia prodest contusio membris." If the limb was not paralyzed but bruised, a poultice of lily would be beneficial. Cf. Stille and Maisch, Nat. Dispen., p.458.

189. Ibid., XIV. "...nec non restringere sanguinis undas Corpore diffusas facili solet obvia gustu."

190. Neuberger, Geschich. der Med., II, pt.2, p.272. Neuberger does not give his source for this information. Although the manner of application of this salve is not given; it is interesting to note that if the paralytic was massaged he would have felt a temporary relief.

191. De Univer., XVIII,5. "Lippus oculis est, qui ingenium quidem intelligentiae habet...Lippus est, quem terrena cupiditas deprimens, mentis coulos ad coelestia contemplanda elevare non sinit."

On the other hand, Walafrid suggested a physical cause for blindness:

But alas! both its [lovage] scent and its sap are unkind,
They are bad for the eyes and will make a man blind. ¹⁹²

Three physical remedies were mentioned by contemporary writers for eye disorders. Raban called attention to the fact that "in Italy the fountain of Cicero cures eye disease."¹⁹³ There was also an unguent remedy for blindness used by the monk, Iso,¹⁹⁴ Walafrid, in speaking of fennel, said, "It is good for weak eyes I have heard many tell..."¹⁹⁵

The only ear disorders for which there is evidence are deafness and split ear. Raban forcefully attributed both of these to sin: "...he is deaf who despises to hear the word of God...He has a split ear who does not show obedience to the teachings of the Word of God."¹⁹⁶

192. De Cultur. Hortor., XIII. "...Hoc germen suco quamvis et odore gemellis oribus officere et tenebras inferre putetur..."

193. De Univer., XI, 1. "In Italia fons Ciceronis oculorum vulnera curat."

194. Neuberger, op.cit., II, pt. 2, p. 272. Today certain unguents are used for sore eyes, but real blindness could not be cured by salves.

195. De Cultur. Hortor., XI. "...Hoc oculis, quos umbra premit, prodesse locuntur..." Fennel has an internal use today, but is not used externally.

196. De Univer., XVIII, 5. "...surdus, qui contemnit audire verbum Dei. Aures abscissam habet, qui obedientiam in Dei praeceptis non exhibet..."

One reference to muteness was found. Raban connected this misfortune with religious apathy: "He is dumb who does not speak the word of God or sing praise to God..."¹⁹⁷

Such stomach disorders as *dyapepsia*, biliousness, boils of the stomach, and griping of the bowels were mentioned by Walafrið. For all of these he prescribed physical remedies. Dyspepsia could be relieved by a decoction of the herb poppy (*papaver*):

The belching of wind it will quickly allay,
And take the foul taste in your mouth right away.¹⁹⁸

The same poet attributed to the herb horehound (*marrubium*) similar curative powers:

...Bitter and sour
To the palate it is, though the odor is sweet,
A draught of this herb should be taken to meet
Sudden pains in the heart.
Heated up it is best,
And drunk after dinner your food to digest.¹⁹⁹

Probably Walafrið referred to the heartburn characteristic of dyspepsia in this passage. For biliousness a herb preparation the chief constituent of which was parsley (*apium*) was recommended:

197. *De Univer.*, XVIII,5. "Mutus est, qui non praedicat Dei verbum, nec laudem Deo cantat..."

198. *De Cultur. Hortor.*, XVI. "...qui ructus nimium convolvit amaro, oris adusque fores, reprimi persaepe videtur." Opium would be more apt to cause nausea than relieve belching.

199. *Ibid.*, X.

"...Dulce enim olet, non dulce sapit, sed pectoris aegros.

Comprimit angores, tristi dum sumitur haustu,
Praecipue talis caleat si potus ab igni
Et coenam cyatis cogatur claudere crebis..."

It is worthy of note that today horehound is used for dyspepsia.

If a bit of the leaf you can manage as well,
 This guarantees perfect digestion at meals.
 Suppose now His Majesty bilious feels
 Mix vinegar, parsley and water in one;
 Then the belly recovers and the gripes are soon done.²⁰⁰

Significant in this passage is the advice for a preventive treatment to ward off dyspepsia. In regard to boils of the stomach, Walafrid suggested fennel (foeniculum):

And should you have boils in the stomach, the seed,
 If taken in goat's milk will answer your need.²⁰¹

Gripping of the bowels (dolor ventris) irritated many of the Carolingian Franks. Walafrid gave directions for relieving this disturbance by powdered agrimony (agrimonia), or a poultice formed of chevril (cerfolium), poppy (papaver), and leaves of pennyroyal (puleium). In regard to agrimony he said,

...Supposing you groan
 With the direst of pains in your belly, just take
 A dose of it powdered - away goes the ache! ²⁰²

Writing of chevril, the same poet remarked:

200. De Cultur. Hortor., XX.

"...ipsum etiam tenero cum germine mansum
 Consequit errantes stomachi penetralibus escas.
 Corporis hunc regem turbans si nausea vexet,
 Mox apium lymphæ tristisque bibatur aceto,
 Passio tum celeri cedet devicta medellæ."

Parsley has a different medical usage today.

201. Ibid., XI.

"Huius item semen foetæ cum lacte capellæ
 Absumptum ventris fertur mollire tumorem,
 Cunctantisque moras dissolvere protinus alvi."

Fennel is used for nausea and colic. It is doubtful whether or not Walafrid or his contemporaries could diagnose stomach ulcers correctly, and many of the cases of supposed ulcers may have been only nausea or colic.

202. Ibid., XXII.

"...Hæc præter varium lætæ virtutis honorem
 Trita domat ventris prædium et pota dolorem."

It is interesting to note that agrimony is used today for the gripping pains of diarrhea.

If ever the gripes on your belly should seize,
 A poultice of chevril will soon give it ease.
 Mix in a few poppy leaves fresh from the field,²⁰³
 And add penny royal and then you'll get healed.

Constipation seems to have been prevalent. For the
 ever-resourceful Walafrid offered herb remedies. Quite empha-
 tic was he in proclaiming the purgative effect of pennyroyal:

Who can doubt of its power our ills to allay,
 When people so rich as the Indians pay
 Any price to obtain it, and readily bring
 To us ivory, gold, every wonderful thing?
 If stewed, pennyroyal, my friend, is of use
 As a draught or a poultice the bowels to loose.²⁰⁴

From this passage a commerce in medicines with the East is
 apparent. Fennel could also be used as a cathartic. In the
 words of Walafrid,

This medicine has an additional use,
 The bowels if sluggish or stubborn to loose.²⁰⁵

203. De Cultur. Hortor., XIV.

"Illa quoque infesto venter dum forte dolore
 Turbatur, fomenta super non irrita ducit,
 Puleium sibimet frondesque papaveris addens."

It is interesting that pennyroyal is used today to correct the
 nauseating or griping operation of purgatives.

204. Ibid. XIX.

"Non patitur cunctas angustia carminis huius
 Pulei virtutes celeri comprehendere versu
 Hoc apud Indorum tanti constare peritos
 Fertur, apud Gallos quanti valet Indica Congeries piperis...
 Puleium quoque decoctum curabit, amice,
 Et potu et fotu stomachum(mihi crede) morantem."

Pennyroyal has a different medical use today.

205. Ibid., XI. "Cunctantisque moras dissolvere protinus
 alvi." Fennel is not used for this purpose today.

Describing the virtues of costmary, the same poet said,

"...when the bowels are fast,
A bit of the root, if made into a stew,
Your belly will purge and its health will renew."²⁰⁶

Mention was made of gout in the Carolingian sources.

Eginhard told of the suffering of a certain Frumold from this malady:

Frumold, son of Count N...is suffering from infirmity rather than old age, being troubled with a chronic case of severe gout...in consequence of the infirmity that weighs upon him he cannot appear at court...²⁰⁷

The same chronicler said that Charlemagne was troubled by a lameness of one foot (uno pede claudico).²⁰⁸ There is an amusing little Carolingian poem extant in which gout (podagra) is personified and contrasted with a flea (pulex). The lines "While the gout began to disturb the body of the rich man, the flea started to disturb your couch, O needy man..." are interesting for the association of gout with opulence.²⁰⁹ Definite remedies were employed for gout. In regard to the case of Frumold, Egin-

206. De Cultur. Hortor, XVII.

"...latet stomachique moras ventremque salubri
Provocat auxilio radicis munere coctae."

Today costmary is used with senna as a purgative.

207. Epist., XXVII. "Frumoldus filius N. comitis...
magis infirmitate quam senectute confectusnam continuo ac gravi
pedum dolore vexatur...propter infirmitatem, qua premitur, ad
palatium venire non potest..."

208. Vit. Karoli, c. XXII.

209. Anon., Fabula Podagrae et Pulicis.

"Divitis interea gressus lacerare podagra,
At pulix stratum coepit, egene, tuum."

Today gout is considered a disease of heavy eaters and these are often wealthy persons.

hard's statement that he "recovered his strength..."²¹⁰ implies that gout could be relieved. The doctors of Charlemagne prescribed dietary regulations:

Even then (after he was gouty) he followed his own opinion rather than the advice of his doctors, whom he almost hated, because they advised him to give up the roast meat to which he was accustomed, and eat boiled instead.²¹¹

However, the Emperor himself followed his own idea of treatment. "He took delight in the vapour of naturally hot waters, and constantly practiced swimming..."²¹²

Of the constitutional diseases not only gout but also a disease of the bladder was described. Walafrid gave detailed information of a preparation of cornflag (gladiola) which was used for this malady:

First, we pound in a mortar a piece of your root;
Next, the shreds that remain with strong wine we dilute.
This makes a decoction that serves to allay
All diseases of the bladder and drives pain away.²¹³

210. Epist., XXVII. "...viribus receptis..."

211. Egin., Vit. Karoli, c.XXII. "Et tunc quidem plura suo arbitrato quam medicorum consilio faciebat, quos pene exosos habet, quod ei incibus assa quibus assuetus erat, dimittere et elixis adsuescere suadebant..." Neither boiled nor roasted meat should be eaten by a person with gout; yet the association of the ailment with dietary control is sound.

212. Loc.cit. "Delectabatur etiam vaporibus aquarum naturaliter calentium, frequenti natatu corpus exercens..." Baths are often recommended today for gout.

213. De Cultur. Hortor., XII.

"...Radicis ramenta tuae siccata fluenti
Diluimus contusa mero saevumque dolorem
Vesicae premimus tali non sceius arte."

There are references in the Carolingian sources to pains in the heart, diseases of the blood, ^{and} dropsy. For a pain in the heart (aegrus pectoris) Walafrid prescribed a draught of horehound (marrubium):

" A draught of this herb should be taken to meet
Sudden pains in the heart,
Heated up it is best..." 214

Raban commented on the degenerative diseases of the blood:

"Blood is not unimpaired except in youths, for doctors say that blood diminishes in excellence by age and so old men have a tremor." 215 Dropsy (hydropicus) was mentioned by Raban and Halitgarius. It is interesting that both of these writers associated dropsy with avarice. Halitgarius said, "This pest (avarice) is insatiable as is the disease dropsy because in drinking a man does not extinguish thirst but rather increases it..." 216 According to Raban, "Dropsy indicates a man of avarice because like dropsy the more he drinks the more he thirsts." 217

214. De Cultur. Hortor., XI.

"...sed pectoris aegros

Comprimit angores, tristi dum sumitur haustu,

Praecipue talis caleat si potus ab igni..."

If this pain in the heart was the heartburn characteristic of indigestion, horehound would be beneficial.

215. De Univer., VI,1. "Sanguis autem integer non est, nisi in juvenibus. Nam dicunt physici minui sanguinem per aetatem."

216. De Poenit., I,12. "Quae pestis insaturabilis est, sicut morbus hydropici: quia in bibendo non sitim extinguit, sed potando succrescit..."

217. De Univer., XVIII,5. "Hydropicus significat avarum hominem: quia sicut hydropicus quanto plus bibit, tanto plus sitit..."

Eginhard was vexed with several complications which seem to have been rooted in kidney diseases. In April 830 he wrote a letter to the Empress Judith,²¹⁸ in which he said,

May my most pious lady deign to learn that I, your servant, have been afflicted with such bodily ills since I came away from Aix that I could hardly get from Maastricht to Valenciennes in ten days. There so violent a pain in my kidneys and also in my spleen attacked me that I could not accomplish even one mile...God is my witness that I write you no untruth in regard to my health, and not only that but also there are certain other ills much more serious which I am suffering, about which I cannot write.²¹⁹

Shortly after he gave a complete account of his illness to a friend:

If my feebleness of body did not prevent, I should not be sending this letter, but rather coming myself... because I was not strong enough to ride I went by water...for an excessive looseness of the bowels and a pain in the kidneys so followed each other alternately that there was not a day after I started from Aix that I did not suffer from one or the other trouble. There are likewise other ills which came from that sickness with which I was laid up last year,

218. Judith was the second wife of Louis the Pious.

219. *Epist.*, XIII. "Cognoscere dignetur piissima domina nostra, quod ego servus vester, postquam de Aquis exivi, tantis corporis incommodis affectus sum, ut de Traiecto vix decimo die pervenire possem ad Valentianas. Ibi me tam magnus renium simul ac splenis dolor invasit, ut ne unum quidem miliarium in integro die valeam equitando conficere...Deus testis est, quod de infirmitate mea nullam falsitatem vobis scripsi; et non solum hoc, sed etiam, quod multo graviora sunt alia quedam incommoda, que patior in memetipso, de quibus nisi cum fidelissimo nullam possum habere locutionem."

namely a constant numbness of the right thigh and an almost unendurable pain in my spleen. Afflicted with these sufferings, I am passing a sad life..."220

In this passage Eginhard's association of his present condition with a previous illness is significant for it reveals a recognition of a physical rather than a spiritual basis for suffering. He also told his troubles to Emperor Louis the Pious:

On setting out I was seized with a pain in the spleen and also the kidneys, and I was so ill that I hardly reached Valenciennes from Maastricht in ten days... now lying here in great pain and distress..."221

Coughs, dryness of the throat, pleurisy, asthma, and croup annoyed the Carolingian Franks. Alcuin ventured a definition for a cold in one of his conversations with Charlemagne's son, Pipin, saying it was "the febricity of our members."222 Both prophylactic and therapeutic treatment was employed for these ailments. Walafrid suggested a preventative for asthma and croup in a concoction of fennel:

220. *Epist.*, XIV. "Si me imbecillitas corporis non impediret, non has litteras mitterem, sed potius ipse venirem et in his, que apud vos aguntur, simul vobiscum essem...Inde, qui iam equitare non valui, usque...navigavi. Nam et nimia ventris solutio et renium dolor sic in me alternando sibi succedunt, ut nulla dies fuerit, postquam de Aquis promovi, quin hac vel illa infirmitate laborarem. Sunt pariter hec et alia, que mihi ex illo morbo, in quo anno preterito iacui, contigerant, dextri videlicet femoris continuus torpor ac splenis pene intolerabilis dolor. His passionibus affectus valde tristem ac pene omni iucunditate carentem duco vitam..."

221. *Epist.*, XV. "In qua profectione splenis simul ac renium dolore correptus in tantum affectus sum, ut vix in decem diebus de Traiecto ad Valentianas venirem...atque ibi nunc in magnis angustiis ac doloribus positus..."

222. Alcuin, "Disputatio", (*Didascalica, Patrol. lat.* CI, 977). "Febricitas membrorum."

"And if from the root you prepare a rich soup
Mixed with wine, it will keep off the asthma and croup." 223

Radish was a charm against colds according to Walafrid:

A piece of this hot-flavored root bitten off
And chewed, will expell the most shattering cough;
And a similar cure as a rule will proceed 224
From taking a flower prepared from the seed.

In regard to a dry and rasping throat, the same poet gave the
testimony of singers:

According to singers one kind will dispel
All harshness and make the voice clear as a bell.
For continual rasping soon dries up the throat;
Drink some peppermint- that will enliven your note! 225

Eginhard described Charlemagne's attempt to treat his own
pleurisy:

Whilst he was spending the winter there (at Aix), he
was attacked by a sharp fever, and took to his bed.
Then, following his usual habit, he determined to
abstain from food, thinking that by such self-discipline
he would be able either to cure or to alleviate the
disease. However, the fever was complicated by a pain

223. De Cultur. Hortor., XI.

"Praeterea radix maratri commixta liquori
Lenaeo tussim percepta repellit anhelam."

Fennel has a different medical use today.

224. Ibid., XXV.

"Cuius amara satis quatientem viscera tussim
Mansa premit radix, triti quoque seminis haustus
Eiusdem vitio pestis persaepe medetur."

Although this plant has a medical use today, it is not used for
coughs.

225. De Cultur. Hortor., XVIII.

"...huius quoddam genus utile vocem
Raucisonam claro rursus redhibere canori
Posse putant, eius sucos si fauce vorarit
Ieiuna, quem crebra premens raucedo fatigat."

Of course mint has a similar usage today.

in the side, which the Greeks call pleurisy; and as Charlemagne still persisted in fasting and only drank very rarely to sustain his strength, seven days after he had taken to his bed, he received holy communion and died...226

The religious character of Charlemagne's fasting treatment is noteworthy. That Eginhard recognized the classical origin of the term pleurisin is also significant.

The problem of treating wounds often presented itself to the Carolingian Franks. Walafrid in his Life of Saint Gall (Vita Sancti Galli) recognized that open wounds could easily be infected by contact with objects.²²⁷ Hence, care was probably observed by intelligent people of this period to avoid infection. Apparently doctors used effective methods of treating wounds. Note the following story of Eginhard:

Though this misfortune had seriously injured many of those who had fallen, nevertheless it brought no other wounds except to the handle of the sword with which he (a certain Theodus) was girded, the lower part of his heart was torn and on the lower

226. Vit. Karoli, XXX. "Cumque ibi hyemaret, mense Ianuario, febre valida correptus decubuit. Qui statim, ut in febribus solebat, cibi sibi abstinentiam indixit, arbitratus hac continentia morbum posse depelli vel certe mitigari; sed accedente ad febrem lateris dolore, quem Graeci pleuresin sustentante, septimo postquam decubuit die sacra communione percepta decessit..." A fasting diet would be harmful to a person with pleurisy.

227. Cf. supra, p. 62 for discussion of Vit. S. Gall., II, 36.

right side of his ear he was wounded and his right thigh next to his loins was crushed by the weight of the wood. However, because of the pressing speed of doctors who brought help to him he recovered with rapidity for the twentieth day after the accident... he engaged in hunting.²²⁸

More definite information on the methods used by doctors for wounds is revealed in the Carolingian law of the Alemanni (Lex Alamannorum Karolina). Thus, in reference to a doctor,

If he (a doctor) takes a fractured bone from the head resulting from the blow...if there shall be a broken bone across the neck so that the brain appears and the doctor can touch it with a surgical instrument...Yet if the cervella protrudes from the blow itself as is accustomed to happen so that the doctor closes it up with a medicant or linen bandage and if afterwards it has been cured...²²⁹

It is evident that surgical methods were effectively employed by doctors for open wounds. Specific remedies for wounds of various types such as open wounds, scars and wounds from weapons were described by Raban and Walafrid. Raban listed among his

228. Annal., An.817. "Qui casus cum plerosque ex his qui simul deciderant graviter adfecisset, illi tamen nihil aliut laesionis intulit praeter quod capulo gladii quo accinctus erat, imi pectoris pars sinistra contusa est, et auris dextra in parte posteriore vulnerata, femur quoque dextrum cuiusdam ligni pondere iuxta inguina conlissum. Sed instantia medicorum qui ei curam adhibebant, summa celeritate convaluit. Nam vicesima postquam id acciderat die...venatu sese exercebat."

229. Lex Alamannorum Karolina, LIX. "1. Si quis alium per iram percusserit quod Alamanni pulis lac dicunt...3. Si autem testa transcapulata fuerit, ita ut cervella (cerebrum) appareat et medicus cum pinna aut cum fanone cervella tetigit... Si autem ex ipsa plaga cervella (cerebellum) exierint sicut solet contingere ut medicus cum medicamento aut sirico stupavit et postea sanavit..."

curative waters those with unusual properties for wounds. In his words, "For it is said that the water near Albula, Rome, cures wounds."²³⁰ Walafrið described the curing of wounds by preparations of betony (vettonica), catmint (nepeta), santhem wood (abrotanum) and agrimony (agrimonia). All kinds of internal wounds and injuries of the head were relieved by betony:

Indeed there are people who so much admire
Its numerous properties that they assert
That from every possible internal hurt
The body by betony's aid can be freed.
In accordance with this day by day they proceed
To toss off a dose of the powerful herb.
Again if a wound in the head should disturb
Your peace and contentment, and threaten to rot,
Clap a poultice of betony leaves on the spot.
Then watch how the strength of the herb is revealed,²³¹
As the sore disappears and the wound is soon healed.

The scars from wounds entirely disappeared when one used an ointment of catmint:

230. De Univer., XI, 1. "Nam (fertur) juxta Romam Albulae aquae vulneribus medentur." Possibly certain mineral waters had antiseptic value.

231. De Cultur. Hortor., XXI.

"...huius virtus mirabilis herbae
Omnia sufficiet, quam quosdam pendere tanti
Novimus, ut contra totam quae iniuria corpus
Impetit interius, muniri viribus eius
Sese posse rati, soleant haurire diebus
Continuis hoc acre genus medicaminis almi.
Praeterea caput infesto si vulnere fractum
Tabuerit, tum creba terens imposito sacrae
Tegmina, vettonicae, statim mirabere vires
Illius, in solidum fuerit dum clausa cicatrix."

This herb has a different modern medical usage.

...If you mix up its juice
 With some essence of roses, you have for your use
 A magnificent salve, by whose means it is proved
 All manner of scars can be wholly removed.
 Unsightly disfigurements speedily yield
 And the skin its old color recovers when healed.
 Though your head with a festering fissure be sore,²³²
 This ointment will make your hair grown as before.

Among the virtues of santhem wood was the ability to remove
 pieces of weapons and stop the resultant bleeding:

It...expels cruel darts,
 And whenever a weapon has pierced several parts,
 Any unobserved bleeding it stops and relieves,²³³
 In short, it has virtues as many as leaves!

Agrimony had a similar usage:

Again, in a wound if a fragment of steel
 Gets imbedded, try this way of making it heal.
 Take a leaf, and well bruise it, and place it with care
 Where the mouth of the wound is exposed to the air.
 If you rub a few drops of sour vinegar round,
 The trouble will pass and the place be made sound.²³⁴

232. De Cultur. Hortor., XXIV.

"Huius enim sucus, rosea commixtus olivo,
 Efficit unguentum, laesae quod vulnera carnis
 Atque cicatricum deformia signa novarum
 Posse abolere aiunt, prisco et reparare nitori,
 Et revocare philos, plagae quos forte recentis
 Pestis hiulca tulit, sanie taboque peresos."

Catmint has a medical usage today of a different character.

233. Ibid., VI.

"...telum fugat, adiuvat artus,
 Quos incerta premit furtivae iniuria guttae.
 Praeterea tot habet vires quot fila comarum."

234. Ibid., XXII.

"Si quae forte calybs infensus vulnera membris
 Indiderit nostris, huius temptare iubemur
 Auxilium, partique imponere tunsa patienti
 Germina, maturam nacturi hac arte vigorem,
 Si tamen addatur mordens cataplasmati acetum."

Agrimony is used today. Vinegar would have had an astringent
 antiseptic effect and, hence, be beneficial.

Cripples and hunchbacks were mentioned in the sources, usually with spiritual significance. Raban wrote that, "He is lame who only sees where his step leads but the infirmity of mind does not permit him to live well."²³⁵ Notker related that Pippin, one of Charlemagne's elder sons, was a hunchback (grip-perosus).²³⁶

Raban mentioned such malformations as a twisted nose (nasus tortus), a rent tongue (lingua abscissa), a crushed hand (manus fracta) and broken testicles (testiculus confractus). These, he said, were the result of religious negligence:

He has a twisted nose who does not discriminate between good and evil. He has a rent tongue who does not confess the right belief. He has a broken hand who takes no part in good deeds...He has broken testicles who does not have a strong feeling against vices.²³⁷

Walafrid referred to a stricture (tricae torquentae), and suggested a powder of parsley (apium) as a remedy:

If you swallow a powder prepared from the seed,
A stricture it readily serves to dispel.²³⁸

235. Raban., De Univer., XVIII, 5. "Clausus est, qui, quo operis gressus tendat, videt: sed eum infirmitas mentis bene agere non sinit."

236. Gesta Karoli, II, 12.

237. De Univer., XVIII, 5. "Torto naso est, qui ad discretionem boni ac mali idoneus non est. Linguam abscissam habet: rectam minime confitetur. Manum fractam habet, qui ab actione recta exsors vacat...Confractis testiculis est, qui virides sensus adversus vitia non habet."

238. De Cultur. Hortor., XX.

"...cuius si trita capessas
Semina, torquentes urinae frangere tricas
Dicitur..."

Parsley has a different medical usage today.

Sunstroke (aestus solis) was another of the current misfortunes. Walafrid prescribed pennyroyal (puleium) for this:

As these evident, well-proven facts I relate,
Common-sense will permit me from hearsay to state
That a sprig of this herb placed between the two ears
Is a certain protection against any fears
Of a sun-stroke, supposing your head be exposed.²³⁹

In this passage Walafrid's confession that the source of his medical information is gossip and rumor is significant.

For snake bites, Walafrid advised a compound of lily (lilium):

Suppose that some treacherous serpent should bite,
And its poison, acquired by inherited spite,
Should inject in the wound, so that cruel death dart
Unseen through the devious veins of the heart;
Take a pestle, and beat up a lily quite fine,
And drink the juice mixed with Falernian wine!
The rest of the leaves that are bruised you may place
On a pimple or spot that disfigures your face.²⁴⁰

239. De Cultur. Hortor., XIX.

"Quaedam audita etiam vero miscere coturno
Fas ususque sinit; ramum coniungito pulei
Auriculae, ne forte caput turbaverit aestus
Solis in aerio si te perflarit aperto."

Pennyroyal has a different medical usage.

240. Ibid., XV.

"...necnon si perfidus anguis
Ingenitis collecta dolis serit ore venena
Pestifero, caecum per vulnus ad intima mortem
Corda feram mittens, pistillo lilia praestat
Commacerare gravi sucos que haurire Falerno.
Si quod contusum est summo liventis in ore
Ponatur puncti, tum iam dinoscere vires
Magnificas huiusce datur medicaminis ultro."

It is interesting that the wine in this concoction would act as a circulatory stimulant for snake poisoning. Cf. George B. Wood, Therapeutics, its Principles and Practices, p.934.

Walafrid's comment, in this passage, of the serpent's "inherited spite" is interesting; a religious element appears to have been inevitable, even in a list of physical remedies. According to Zimmer, the scrapings from the leaves of books of Irish missionaries, mixed with water, were used as a means of counteracting the poison of serpents.²⁴¹ If one accepts this statement, the consideration of such an antidote is pertinent, for many Irish missionaries went to France.

Malicious poisoning seems to have occurred constantly. Walafrid provided for such a catastrophe in his list of herb remedies. In reference to horehound (marrubium) he said,

Again if your stepmother bears you ill will
And mixes a poisonous aconite pill
In your food, and rejoices to see you look sad
As you swallow the drug and begin to feel bad,
Never worry, but drink off a cup of this herb,²⁴²
Your stepmother's evil designs it will curb.

The herb rue (ruta) had similar marvelous powers:

That even from poisons unknown it protects,
And the noxious drug from the system ejects.²⁴³

241. H. Zimmer, Berührungen der Iren, p.78.

242. De Cultur. Hortor., X.

"Si quando infensae quaesita venena novercae
Potibus inmiscent dapivusve aconita dolosis
Tristia confundunt, extemplo sumpta salubris
Potio marrubii suspecta pericula pressat."

Horehound has a different medical use today.

243. Ibid., V.

"Dicitur occultis adprime abstare venenis
Toxicaque invasis incommoda pelleret fibris."

Rue has a different medical use today.

Eruptions of the skin belong in the list of disorders of this period. Spiritual causation for various types of these was expounded by Raban: "He has an eruption on his body whom carnal luxury makes weak-minded. He has a scabby eruption in whose heart avarice rules. Some have felt this disease in the assemblies of heretics."²⁴⁴

Several abnormal growths were described. Walafrið mentioned a disease characterized by a carbuncle in the chest (carbunculus pectore) for which he suggested a decoction of poppy (papaver) as a remedy:

The same remedy serves, if you're ever distressed,
By a nasty black carbuncle inside your chest.²⁴⁵

Lupus related his own suffering from a tumor of the right groin (pustula in dextro inguine):

244. De Univer., XVIII, 5. "Scabiem in corpore habet, quem luxuria carnis devastat in mente. Impetiginem habet, cui avaritia dominatur in corde. Alii hanc impetiginem conciliabula haereticorum intellexerunt."

245. De Cultur. Hortor., XVI.

"Hoc simul auxilio carbunculus ater ab imo
Pectores, qui ructus nimium convolvit amaros
Oris adusque fores, reprimi persaepe videtur."

Probably Walafrið referred to an abscess of the lung which could burst and be coughed up by the patient. Hence, recovery would be possible without treatment. The opium from poppy would relieve any sort of pain temporarily, but would be of no permanent value for a carbuncle in the chest.

Truly you know that this malady which has taken hold of me, has not been, thanks to the divine favor which has always surrounded me in all things, as much of detriment to me as a benefit because it has not caused me any misfortune but fear. Indeed a tumor has formed in my right groin and has threatened me with death. Yet, on the other hand, it has produced so many prayers, especially when the news of my accident has spread that I dare to think that my sickness was caused by divine beneficence.²⁴⁶

If Lupus was sincere, his attitude toward his affliction was quite remarkable.

Examples of headache are found in the sources. For this malady specific remedies were prescribed. Lupus suggested that perhaps a "sparing drink" (potus parcitas) would take away the headache of my nephew, if his appetite is seized by it."²⁴⁷ External treatment was recommended by Walafrid:

246. Epistolae, VIII. "Infirmittatem vero, quam contigisse mihi audisti, cognoscas, exuberante circa me, ut semper et in omnibus, divina gratia, detrimenti nihil at emolumenti plurimum addidisse, quippe nihil incommodi praeter formidinem solam tulit. Orta enim in dextro inguine pustula imponentem solum minata est mortem, tantam autem orationum peperit copiam, quaecumque meum fama casum dissipaverat, ut opinari audeam eum divino mihi beneficio procuratum." Probably Lupus suffered from an abscess.

247. Ibid., LXV. "Capitis autem dolorem nepoti meo parcitas potus forsitan detrahet, si ejus appetentior fuerit deprehensis. Alioqui nostro curandus reservabitur medico, qui omnes, quarum nullam non ignorat, depellere se posse confidit infirmitates." Any sort of alcoholic stimulant would relieve pain.

If your temples turn giddy and suffer from ache,
 A decoction of wormwood is what you should make.
 Boil a handful of leaves and then strain off the juice,
 And refresh the whole head with a thorough good sluice.
 Then, when you have made the scalp clean, sweet and fair,
 Plait the leaves in a fillet to tie up your hair.
 Soon the fillet will shrink and the hair be held tight
 And the herbs many virtues be brought to the light.²⁴⁸

The evidence in Carolingian sources in relation to abortion is interesting. Apparently the performance of an abortion was illegal. In the Carolingian law of the *Allemani* there is a provision:

Concerning a man who causes an abortion to a pregnant woman. If **someone** has caused an abortion so that one could tell whether the child was male or female, and, if it was due to be a male, let him pay with twelve *solidi*; if female, let him pay twenty-four. If one is not able to distinguish and if it is not properly formed in outline of body, let him pay twelve *solidi*. If there is a further requirement, there must be satisfaction with the set sum.²⁴⁹

248. De Cultur. Hortor., IX.

"Si tibi praeterea caput acri forte dolore
 Pulsetur subito, vel si vertigo fatiget,
 Huius opem rimare, coquens frondentis amaram
 Absinthii silvam, tum iura lebetes capaci
 Effunde, et capitis perfunde cacumina summi.
 Quo postquam ablueris graciles humore capillos,
 Devinctas frondes super imposuisse memento.
 Tum mollis fotos constringat fascia crines,
 Et post non multas elapsi temporis horas
 Hoc inter reliquas eius mirabere vires."

Wormwood has a different medical usage today.

249. Lex Alamannorum Karolina, XCI. "Si quis mulieri
 pregnantis abortivum fecerit, ita ut iam cognoscere possit utrum
 vir an femina fuit: si vir debuit esse, cum 12 solidis componat;
 si autem femina, cum 24. Si nec utrum cognoscere potest et
 iam non formatus in liniamenta corporis, cum 12 solidis componat.
 Si amplius requirit, cum sacramentatibus suis se idoneet."

Canon law recognized abortion as an act which deserved penalty.

Halitgarius wrote,

Concerning the women who kill their offspring or those who try to throw off their conception from the womb. There is an ancient law concerning the end of life which removes them from the church. However, we give the definition more kindly now, so that we get a bounty from them of ten years, according to the fixed grade of penance.²⁵⁰

According to Raban, "The Lechnus fountain of Arcadia permits abortion to take place."²⁵¹

Some information is available concerning sterility. Raban reveals a definite concept of the cause of sterility:

After many menstrual days the seed does not generate because then there is no menstrual blood. A little bit of semen does not have the power to cling to women. Similarly it does not have the power of producing life because on account of its density it cannot be mixed with blood. For this reason men and women can be barren through too much density of the semen or blood, or on account of too much thinness.²⁵²

250. De Poenit., IV, 3. "De mulieribus quae partus suos necant, vel quae agunt secum ut utero conceptus excutiant. Antiqua quidem definitio usque ad exitum vitae eas ab ecclesia removet. Humanius autem nunc definimus ut eis decem annorum tempus secundum praefixos gradus poenitentiae largiamur."

251. De Univer., XI, 1. "Lechnus fons Arcadiae abortus fieri non patitur."

252. De Univer., VI, 1. "Post plurimos autem dies menstruos ideo semen non esse generabile, quia jam non est menstrualis sanguis, a quo perfusus irrigetur. Tenue semen locis mulieribus non potest adhaerere. Labitur enim, nec habet vim adhaerendi. Similiter et spissum vim non habet gignendi, quia muliebri sanguini misceri non potest propter nimiam sui spissitudinem. Hinc et steriles mares vel feminas fieri per nimiam seminis vel sanguinis crassitudinem vel propter nimiam raritatem."

This explanation -though incorrect- presents two noteworthy ideas: a physical basis for sterility, and an association of this condition with menstruation. The same writer seems to have thought that sterility in women could be controlled by certain waters:

In Campania are waters which are said to remove the sterility of women...In Sicily, there are two springs, one of which makes a sterile woman fertile, and the other makes a fertile woman sterile...253

253. De Univer. XI,1. "In Campania sunt aquae, quae sterilitatem feminarum...abolere dicuntur...In Sicilia fontes sunt duo, quorum unus sterilem fecundat, alter fecundam sterilem facit."

CHAPTER IV

DOCTORS AND HOSPITALS OF THE CAROLINGIAN FRANKS

After a consideration of the diseases and remedies of the Carolingian Franks, it is pertinent to study the doctors, the equipment and the hospitals of these people. There are few references to secular physicians per se in the contemporary sources; the majority of the doctors had some sort of religious connection. The term used most frequently for doctor was medicus¹; however, a new word physicus², with the same connotation, appeared at this time. There were royal physicians in the palaces of kings. Eginhard, in his account of Charlemagne's gout, referred to his doctors.³ From Alcuin's allusion to the special work of medical students in the "halls of Hippocrates", it is not clear whether these young students were actually Charlemagne's palace doctors or whether they were studying in a school near the palace.⁴ That they were under royal patro-

1. Alcuin., Epist., CVI, CXII; Elogium; Lupus, Epist., LXV; Walafrid., De Cultur. Hortor., XXII; Raban., De Universo, XII,5; XVII,1; XVIII,5.

2. Raban., De Univer., VI,1; XIX,8.

3. Vit. Karoli, c. XXII.

4. Alcuini, Carmina.

age is apparent. Walafrid dedicated his treatise Concerning the Cultivation of Gardens to a certain Grimaldus.⁵ This name appears in a manuscript about a man who, it is inferred, prescribed a suitable diet for King Charles.⁶ Possibly these two references are to the same man, and that Grimaldus was a medical man of the royal court. Apparently the doctors in the service of rulers had an opportunity to acquire a certain amount of wealth, for a writer at the end of the ninth century on the Deeds of the Bishops of Tullensius (Gesta Episcoporum Tullensium) mentioned "lands acquired from Everelmus, a royal physician (of Ludwig) and divided them with the church."⁷ Alcuin referred to a secular physician who traded in medicines: "a doctor, Basilius, who delivered medicines to them from over the mountains at Rome..."⁸ This passage shows that commerce in medicines occurred at this time. The only allusion found to a Jewish doctor was the rumor that Charles the Bald was poisoned by a semitic doctor.⁹

5. "Hortulus Monasterii Sancti Gallensis, Abbati Grimaldo Inscriptus", from edition of J. Walter. This edition was not available for consultation; the reference was obtained from Suppan's Monas. Dispen. of the Mid. Ages, p.391.

6. Poitiers Mss. no.184, f.70-74. "Opusculum Grimaldi bajuli et comitis sacri palatii ad Karolum regem de dieta et nutritura ancipitrum. Si accipitrum. Si accipiter fastidit..."

7. Gesta Episcoporum Tullensium, c.XXIX. "Insper adquisivit ab Everelmo regali medico...et dividium cum ecclesia."

8. Epist., XLV. "Nam Basilius medicus, qui vobis in montanis Romam pergenti medicamenta tradidit, jam mortuus est." This reference does not check in Migne's edition of the Epistola; the material was obtained from Dubreuil Chambardel, op.cit. p.211.

9. Thompson, Mid. Ages, I,296.

On the other hand, there are many references to religious doctors - both to practicing monastic physicians and deceased saints. At Ferrieres there was a monastic doctor whose general curative powers were a source of pride to the Abbot Lupus.¹⁰ Lupus also exclaimed over the remarkable therapeutic ability of Abbot Dido at a nearby monastery at Sens in a letter to this gifted abbot:

The knowledge of your remarkable art is familiar to many and has become particularly well-known to us from the account of your brother Nithardus. From his report we have found that we shall give help to the needy, and that we shall procure permanent aid by a temporary remedy for sick men [with your intercession]. Even if we are unknown to you at present we have not hesitated on account of the unity of our faith, in which we have been most diligent, to respond to your liberality in whatever ways we may. Our sons and also those whom we wish to be yours are suffering from a disease of the body. Several doctors whom we have summoned have not been able to relieve them. Trusting to the Lord and to your devotion, we bring them to you to be cured, so that through us those regaining their desired health may also give thanks for your labor. Let them atone with that devotion of which they are capable because they are monks. We also shall render an altogether worthy compensation. We have been unwilling to extend further our petition lest perchance we should seem to doubt the perfection of your devotion.

10. Epist., LXY. "Alioqui nostro curandus reservabitur medico, qui omnes, quarum nullam non ignorat, depellere se posse confidit infirmitates."

We know that you hasten to help not only those whom you do not know, but also your personal enemies.¹¹

The popularity and generosity of this abbot physician is noteworthy. There seems to have been cooperation between monasteries for treating the sick. Probably Abbot Dido was typical of the practicing monastic physician. The monk Iso of the monastery of Saint Gall, who was famed for his salves, has been mentioned.¹² Walafrid at the same monastery possibly applied his receipts to the sick with whom he came in contact. All of the Irish monks there are thought to have been particularly skillful in the medical art.¹³ Cuissard has found hints that

11. Epist., LXXII. "Artis vestrae singularis peritia multorum ore pervulgata fratris Nithardi potissimum relatione nogis innotuit: quo etiam referente comperimus passim vos accessum indigentibus aperire et sempiternam usuram temporali aegrotantium remedio procurare. Unde, tametsi vobis adhuc sumus ignoti, non dubitavimus propter eiusdem religionis unitatem, cuius etiam vos observantissimos liberalitati modis, quicumque possumus, respondere. Namque et filii nostri, quos et vestros optamus, molestia corporis laborabant; quam aliquot adhibiti apud nos medici propulsare nequiverunt. Hos, Domino et vestrae caritati fidentes, curandos vobis offerimus, ut, per vos optatae sanitatis solatia recuperantes, auctori eiusdem nobiscum gratias referant vestro labori. Illi quidem devotionem, quam solam possunt, ut pote monachi, repensent; vos autem dignum omnino servitium persolvamus. Petitionem nostram diu verbis extendere noluimus, ne forte de vestrae caritatis perfectione dubitare videremur, quae non solum ignotis, verum etiam inimicis, prodesse contendit. Et ideo, up optime nostris..."

12. Cf. supra, pp. 111, 120, 194.

13. Clark, The Abbey of Saint Gall, p. 124.

Bishop Theodulfe of Orleans studied medicine. He has established definitely the fact that Theodulfe was born in Spain, and that near his birthplace there was an Arabian medical school at which the theories of Galen were taught.¹⁴ He also mentioned bits of medical information with which Theodulfe was familiar.¹⁵ In one passage he gave Theodulfe the epithet of doctor along with that of bishop and apostle.¹⁶ The great healing saint, Martin, was still patronized by many of the faithful.¹⁷ Saint Dionysius, the martyr, was also thought to have healing ability.¹⁸ Walafriid's idea of the "true physician" is probably typical of the period: "After some days elapsed, the Lord, who is the true physician, vouchsafed a cure..."¹⁹

One of the most vital questions in the study of the physicians of this period is the educational curriculum. At this period, there was a revival of the study of liberal arts in the schools. Charlemagne issued a capitulary saying, "We charge all subjects so far as they are able to cultivate the liberal arts..."²⁰ Did doctors study the liberal arts? To

14. Cuissard, Théod., Sa Vie et Ses Oeuvres, p.43, et seq.

15. Ibid., p.253.

16. Ibid., p.217.

17. Egin., Annal., An.788,789.

18. Loc.cit.

19. Vit. S. Gall., I,9. "Exactis aliquot diebus, Domino, qui medicus est verus, medelam impertiente..."

20. Capitularia, An.782, "et ad pernoscenda studia liberalium nostro etiam quos. invitamus..."

understand the influences determining the position of medicine in this period, it is appropriate to survey rapidly its status prior to this time. Varro, a friend of Cicero's in the first century B.C., said there were nine disciplines in which he included medicine.²¹ Familiarity with the writings of Varro in the ninth century is revealed by Raban.²² Yet medicine was excluded from the liberal arts by Martianus Capella in the fourth century A.D. because it did not elevate the mind to the contemplation of abstract truth, but was of the earth, earthy; and was therefore unfit for the company of celestials.²³ Vergilius Maro, a fifth century grammarian seems to have associated medicine with geometry (geometria):

Geometry is the disciplinary art which discloses the function of all herbs and plants; from this we call doctors and geometricians brothers, that is, experts in plants.²⁴

21. M. Laistner, Thought and Letters in Western Europe, p.23.

22. De Univer., XII, 5. "Coos insula adjacens provinciae Atticae, in qua Hippocrates medicus natus est, quae (ut Varro testis est)..."

23. Martianus Capella, De Nuptiis Philologiae et Mercurii, Lib.VIII, (Edition Eyssenhardt, p.332). "Supernum pater...qui probandarum numerus superesset...exquirat. Cui Delius Medicinam suggerit. in praeparatis adsistere, 'sed quoniam his mortalium rerum cura terrenorumque sollertia est nec cum aethere quicquam habent superisque confine, non incongrue, si fastidio respuuntur...'

24. Vergilius Maro, Epistolae, IV, 22. (edition Huemer, Lipsiae, 1886). "Geometria est ars disciplinata quae omnium herbarum graminumque experimentum enuntiat: unde et medicos hac fretos geometres vocamus, id est, expertos graminum." This work was not available for consultation. The material was obtained from Rashdall, The Universities of Europe in the Middle Ages, I, 32, note :

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Alcuin was acquainted with the works of Vergilius Maro for he lists him among the authors studied in the library of York.²⁵ Closer to the Carolingian period in point of time was the sixth century Spanish bishop, Isidore of Seville; hence his concept of the place of medicine in the liberal arts is quite significant:

It is sometimes asked why the art of medicine is not included among the other liberal arts. It is because they deal with single causes, but medicine with all. For a medical man should know the ars grammatica, that he may be able to expound that which he reads; and the ars rhetorica that he may be able to support with sound arguments the matters with which he deals; and also the ars dialectica, so that by exercise of reason he may investigate the causes of sickness for the purpose of cure. So too he should know the ars arithmetica, so as to calculate the times (of fever) and its periods; and he should be acquainted with ars geometrica, so that he may teach what every man ought to consider with regard to different places. Moreover, he should know something of music, for many things may be done for the sick by means of this art...Asclepiades restored a madman to his former health by means of a concord of music. Lastly let him have a knowledge of astronomy, by means of which he may understand that calculation of the stars and the changes of the seasons. For a physician says, 'our bodies are affected by their qualities, and therefore medicine is called a second philosophy; for either art arrogates to itself the whole man, since by the one the soul and by the other the body is cured.'²⁶

25. A.F. West, Alcuin and the Rise of the Christian Schools, p.34. "...Quae Maro Vergilius..." *West did not give his source.*

26. Etymologiarum, IV,13. "Quaeritur a quibusdam quare inter ceteras liberales disciplinas Medicinae ars non contineatur. Propterea, quia illae singulares continent causas, ista vero omnium. Nam et Grammaticam medicus scire debet, ut intellegere vel exponere possit quae legit. Similiter et Rhetoricam, ut veracibus argumentis valeat definire quae tractat. Necnon et Dialecticam propter infirmitatum causas ratione adhibita perscrutandas atque curandas. Sic et Arithmeticam propter numerum horarum in accessionibus et periodis dierum. Non aliter et Geometriam propter qualitates regionum et locorum situs, in quibus doceat quid quisque observare oporteat. Porro Musica incognita illi non erit, nam multa sunt quae in aegris hominibus per hanc disciplinam facta leguntur;...Asclepiades quoque medicus phreneticum quendam per symphoniam pristinae sanitati restituit. Postremo et Astronomiam notam habebit, per aquam contempletur rationem astrorum et mutationem temporum. Nam sicut ait quidam medicorum, cum ipsorum qualitatibus et nostra corpora commutantur. Hinc est quod Medicina secunda Philosophia dicitur. Vtraque enim disciplina totum hominem sibi vindicat. Nam sicut per illam anima ita per hanc corpus curatur."

Isidore's influence on ninth century thought is shown by the fact that the encyclopedia (De Universo) of Raban is considered by able modern scholars to have been greatly influenced by the Etymology (Etymologia) of Isidore. As Dubreuil-Chambardel has pointed out, the use of the term physicus for doctor in the ninth century seems to indicate a change in the scholastic definition of medicine.²⁷ Alcuin considered medicine a branch of physics. According to him, physics presupposed a consideration of all natural things, and included arithmetic, astronomy, astrology, mechanics, medicine, geometry, and music.²⁸ Theodulfe referred to physics as a "companion art" (ars socia) of the arts in the quadrivium (arithmetic, geometry, astronomy and music) and the trivium (grammar, rhetoric and dialectics).²⁹ Dungal wrote a poem on the liberal arts (De Artibus Liberalibus) in which he included a verse on medicine with the stanzas on the seven arts in the quadrivium and trivium.³⁰ Hence, although medicine probably did not

27. Dubreuil-Chambardel, op.cit., p.221. My own research in Merovingian sources has shown that the term physicus was not used prior to the Carolingian period.

28. Didascalia, Dialogue de Rhetorica et Virtute. (Patrol. lat. 81, 947)
 Physic natura: Physica naturalis, quae de natura omnium rerum ex contemplatione disputat...

X.

| | |
|-------------|----------------------------|
| | (Arithmetica |
| | (Astronomia |
| | (Astrologia |
| De Physica. | (Mechanica (Al., mechanics |
| | (Medicina |
| | (Geometria |
| | (Musica " |

29. Carmina, line 108. (M.G.H.Poet., I, 629)

30. De Artibus Liberal., IX. (M.G.H.Poet. I, 408)

actually hold a place in the quadrivium and trivium in the Carolingian period, it seems to have been a study of equal importance.³¹

After establishing the theoretical place of medicine in the curriculum at this period, it is necessary to consider the type of education actually obtained by the Carolingian doctors. There was a Carolingian law of 806 which ordered all young people to study the medical art; this capitulary is an exact duplication of an earlier Salic law.³² The training of doctors seems to have been theoretical, practical, specialized, and popular. The extant manuscripts at the monastery of Saint Gall reveal that the monks there studied the theories of Galen and Hippocrates.³³ The documents at Orleans show that these classical scholars were also studied there.³⁴ Raban and Dungal mentioned Hippocrates.³⁵ Alcuin was familiar with the works of Pliny.³⁶ Many Benedictine monasteries seem to

31. According to Dubreuil-Chambardel (op.cit., p.222), medicine had a less definite place in the liberal arts after this time, and he did not know exactly where to place it. He added that it seems to have been considered a branch of grammar in the eleventh century.

32. For Salic law, cf. Ducange, Glossar., IV, 339. "Ut infantes hanc discere mittantur." The same law appears in the Capitulare Missorum, XL, 7.

33. The following manuscripts at Saint Gall are attributed to these and other classical writers: Mss. 44, 225, 751, 761, 762.

34. Cuissard, op.cit., p.253.

35. Raban., De Univer., XVIII, 5; Dungal., De Art Liberal., IX (M.G.H., Poet., 408).

36. West, op.cit., p.34.

have advocated the classical medical authors whom Cassiodorus had advised his monks to study. Thus,

If the language of the Greeks is not known to you you have the book of herbs of Dioskorides who has described and pictured the plants of the field with surprising accuracy. Afterwards, read Hippocrates and Galen in Latin translation; that is to say the Therapeutics of the latter which he addressed to the philosopher, Glaucon, and the work of an anonymous writer which as the examination of it shows is compiled from various authors. A study of the medicine of Aurelius Caelius, the book of Hippocrates upon herbs and methods of cure, and various other writings on the healing art...³⁷

Walafrid's treatise On the Cultivation of Gardens bears evidence that medical knowledge might be acquired from popular as well as classical sources. In one passage he said, "Common sense will permit me from hearsay to state..."³⁸

An example of practical medical training is found in Alcuin's description of medical students who had been taught in the various branches of medicine practiced at this time:

Soon the doctors appear in the halls of Hippocrates. One is engaged in bleeding; another in preparing herbs in the boiler; and a third is concocting beneficial drinks. And again, o doctors, give thanks, so that the blessing of Christ will accompany your hands....³⁹

37. Puschmann, Hist. of Med. Educat., p. 193.

38. De Cultur. Hortor., XIX.

39. Carmina, CCXXVIII. (Patrol. lat. CI, 781)

Accurrunt medici mox Hippocratia tecta,
Hic venas fundit, herbas hic miscet in olla:
Ille coquit pultes, alter sed pocula praeferit:
Et tamen, o medici! cunctis impendite grates
Ut manibus vestris adsit benedictio Christi:"

The training received at this royal school seems to have been somewhat analogous to the apprenticeship obtained by an interne today.

The novitiates' quarters (cella novitiorum) at the Infirmary of the monastery of Saint Gall suggests the same practical and specialized types of training as that afforded at the school of Charlemagne.⁴⁰

Raban's significant reference to "all kinds of doctors" (omnibus generibus medici) also indicates that there may have been some degree of specialization in the medical profession of this period.⁴¹ Dungal's allusion to "special students of medicine" (physici specialiter studentes) seems also to refer to particular types of medical training.⁴² The facilities for practical, specialized training for the medical profession at the monastery of Saint Gall were good. On the ground plan was the doctor's house, the dispensary, and the herb garden. Not far away was the hospital with its chapel, and the "surgery" where the blood-letting was performed. The imperial gardens furnished an excellent opportunity for the study of medical herbs. Among the medicinal herbs found there were lily (lilium), rose (rosa), costum (costum), sage (salvia), santem wood (abro-tanum), cucumber (cucumis), gourd (cucurbita), pumpkin (pepo) paraway (careium), squill (sqilla), cornflag (gladiola), traganth (draganteum), parsley (apium), lovage (levisticum), anise (anetum),

40. Cf. infra, p. 166 for sketch of the infirmary at Saint Gall.

41. De Univer., XVII, 1.

42. Dungal., Epist. De Duplici Solis Eclipsi, An. 810. (Patrol. lat., CV, 455).

fennel (fenicolon), endive(intubum), mustard (sinapis), mint (menta), catmint (napta(sic)), centaury (febre fugia), poppy (papaver), onion (unio and cepa), leek (porus), radish (radix), bean (faba), coriander(coriandrum) and costmary (sclarega).⁴³

Little information is available in regard to the equipment used by Carolingian doctors. Raban referred to a surgical knife (cultrum),⁴⁴ and Theodulfe mentioned a small instrument used in surgery.⁴⁵ Another type of small surgical instrument (fano) was used in connection with open wounds.⁴⁶ Linen bandages (sirico) were also employed to bind wounds.⁴⁷

Certain passages in the sources reveal interesting traits of character of the medical men of this period. Alcuin noted a humility in doctors:

Doctors are accustomed to make a certain kind of medicine from different types of herbs; yet they do not presume to say that they are the creators of herbs or of other kinds of drugs from the composition of which the health of sick men is regained, but they say that they are only servants in collecting and combining them into one body.⁴⁸

43. Karoli Magni Capitularia, XXXII,70.

44. Raban., De Univer., VI,1.

45. Cuissard, op.cit.,p.253.

46. Lex Alamannorum Karolina, LIX,3.

47. Loc.cit.

48. Epist.,CXIII, "...ex multorum speciebus pigmentorum in salutem poscentis quoddam medicamenti solent componere genus, nec se ipsos fateri praesumunt creatores herbarum vel aliarum specierum ex quarum compositione salus efficitur aegrotantium, sed ministros esse in colligendo et in unum...conficiendo corpus." This reference was obtained from Gaskoin's Alcuin.,p.136; it does not check in the Migne edition.

The same writer implied a solicitude on the part of doctors for victims of pestilence.⁴⁹ There seems to have been a sort of code or rule among the doctors which frowned on pagan formulas accompanying the administering of remedies, for Halitgarius alluded to "all the incantations and remedies which the discipline of the doctors condemns..."⁵⁰ The delicacy revealed by Walafrid in his description of the diarrhea of Bishop Sidonius is interesting. He said that he hesitated to write the details of the case.⁵¹

The attitude of the people of Carolingian France toward doctors and their art is significant. The question of greatest interest is the attitude of the great Charlemagne toward the subject. The fact that he followed his own opinion in treating his fevers and lameness of foot rather than that of the doctors indicates that he had little respect for the court physicians.⁵² If the capitulary ordering all young men to study medicine was not a survival of an older Salic law, one might surmise that Charlemagne wished to improve the calibre of contemporary doctors.⁵³ However, one cannot be sure that this capitulary conveys Charlemagne's attitude toward medicine; it may be a mere coincidence that this older law was not discarded. Regardless of what Charlemagne thought of the doctors

49. Cf. supra, p. 115 (Patrol. lat., CV, 713)

50. Liber Poenitentialis. "...omnes etiam ligatura etque remedia, quae medicorum quoque disciplina condemnat..."

51. Cf. supra, p. 36

52. Cf. supra, p. 126

53. Cf. supra, p. 151

themselves, his laws reveal a protective policy toward the sick by the government; there probably were state hospitals,⁵⁴ and there were definite regulations for the segregation of lepers.⁵⁵ In his capitulary concerning his estates (De Villis), he recommended the cultivation of many plants useful in the healing art.⁵⁶

The clergy seem to have had a favorable opinion of doctors. Lupus was proud of the achievement of his monastic doctors.⁵⁷ Walafriid never referred to doctors except in respectful tones. His allusion to a man "with no mean knowledge of medicine" has been cited.⁵⁸ However, Eigile wrote contemptuously of the failure of Wintarus, the royal physician of Charlemagne, to remedy Sturmus' malady:

Sturmus returned to the monastery of God from the home of a servant of Charlemagne, Wintarus by name who treated the sick. Indeed on a certain day...he poured a drink which ought to lessen his suffering, but actually increased it, and made stronger and more severe the character of his plague...⁵⁹

54. Cf. infra, p. 161

55. Cf. supra, pp. 110, 111.

56. Cf. infra, pp. 153, 154.

57. Cf. supra, p. 153.

58. Cf. supra, p. 62

59. Vita Sancti Sturmi, XXV. "...ad monasterium vir Dei rediit, habito secum medico domini regis Caroli, cui nomen Wintarus, qui ejus subveniret infirmitati. Dum vero quadam die, ... quam potionem infuderat, cum qua minuere debuit infirmitatem; sed ita auxit, ut validius et acrius ei lues acerba augeretur."

The rule of Saint Benedict, which was observed in most of the monasteries, reveals a realization of the importance of application of the healing art:

The care of the sick is to be placed above and before everything, so that they may be served as Christ... Yet the sick too should remember that they are being served in honor of God. Let them not impose on the brothers attending them by lack of consideration. However, they must be waited upon patiently. Therefore, there should be the greatest care by the abbot that they suffer no neglect. To the sick brothers should be given a separate room and an attendant who fears God and is diligent and anxious. The use of baths should be given to the sick as often as is expedient (however, healthy people and youths should be given this privilege less often). Let the eating of meats be permitted as a restoration to the weak, yet when they are better they should all abstain from meat, according to their custom.⁶⁰

Doctors seem to have been considered indispensable for treatment of serious wounds. Eginhard said that doctors were immediately summoned in case of accidents.⁶¹

60. Regula Sancti Patris Benedicti (Patrol. lat., CIII, 639, 640). "Infirmorum cura ante omnia et super omnia adhibenda est, ut sicut revera Christo ita eis serviatur... Sed et ipsi infirmi considerent, in honorem Dei sibi servirī, et non superfluitate sua contristent fratres suos servientes sibi; qui tamen patienter portandi sunt... Ergo cura maxima sit abbati, ne aliquam negligentiam patiantur.

"Quibus fratribus infirmis sit cella super se deputata et servitor timens Deum et diligens ac sollicitus. Balnearum usus infirmis, quoties expediat, offeratur (sanis autem et maxime invenibus tardius concedatur). Sed et carnum esus infirmis omnino debilibus pro reparatione concedatur; at ubi meliorati fuerint, a carnibus more solito omnes abstineant."

61. Cf. supra, p. 132.

One of the requirements in case of personal injury was that the offender furnish a doctor to treat the victim.⁶² The doctor seems to have been regarded as a reliable witness for the determination of indemnities for wounds:

Yet if the cervella protrudes from the blow itself as is accustomed to happen, and the doctor closes it up with a medicament, or linen bandage, so that the wound is healed, and the injured person can prove that this is true, let the offender pay forty solidi.⁶³

Dungal enthusiastically sang of the varied powers of the medical art and of its ancient lineage:

The things were hidden which now you see growing clear,
O traveler. If you need medicine, O friend, here place
with fragrant garlands around your temples and take
salutary gifts which Apollo rejoicing uses, and which he,
the first dealer in medicine, discovered. From him Aescul-
apius, the father (of medicine) was born. Long thereafter
Hippocrates increased his work with clear statements.
The medical art is able to check pestilence and drive it
far away. It is able to rout all diseases. Through medi-
cine it gives health to sick men, and nurses weary limbs
with its gift.⁶⁴

(*Patrol. lat.*, CV, 723)

62. Anon., Lib. Poenitentialis, "Si quis per iram alium per-
cusserit, et sanguinem fuderit, aut debilitaverit, solvat ei
primum mercedem et medicum quaerat;"

63. Lex Alamannorum Karoli, LIX, 3. "Si autem testa trans-
capulata fuerit, ita ut cervella appareat et medicus cum pinna
aut cum fanone cervella tetigit, cum 12 solidi componat."

64. De Art Liberal., IX. (M.G.H. Poet., I, 408)

"Lucida quae cernis clarescere tecta, viator,
Si medicina tibi est opus, hospes odi,
Hic quia odoriferis circumdata tympora sertis
Ipsa salutifera munera tractat ovans.
Quam repperit primus phisicae tractator Apollo,
Cum quo Scolaphius, natus hic ille pater.
Post quos Hypocrates longo post tempore id ipsum
Dogmatibus claris magnificavit opus
Haec sorbere lues, longe et depellere pestes,
Haec morbos cunctus namque fugare potest.
Ipsa quidem egrotis reddit medicando salutem,
Munere deque suo languida membra fovens."

Raban also revered the ancient character of medicine:

In truth the father and founder of the medical art is considered among the Greeks to be Apollo; his son, Aesculapius, expanded this art by inspiration and labor. However, after Aesculapius perished by strokes of lightning, the art of medicine is said to have been forbidden, and the art simultaneously with the founder disappeared. It lay hidden almost continuously through fifty years to the time of Antaxerxes, King of the Persians. At that time Hippocrates, who was descended from the father, Aesculapius, revived it on the island of Cos.⁶⁵

Alcuin defined medicine as "the science invented for the curing of the body, for balance and health."⁶⁶ His pupil, Raban proposed an even broader definition of medicine:

Medicine is either to care for the body or to restore health; from it the material is used for diseases or wounds. On account of this it accordingly pertains not so much to those who exhibit their art, who are properly called doctors, but also to the food and drink and clothing and shelter and finally the defense of all. By medicine a healthy body is kept from the misfortune of external blows.⁶⁷

65. De Univer., XVIII, 5. "Medicinae autem artis auctor ac repertor apud Graecos perhibetur Apollo; hanc filius ejus Aesculapius laude vel opere ampliavit. Sed postquam fulminis ictu Aesculapius interiit, interdicta fertur medendi cura, et ars simul cum auctore defecit, latuitque per annos pene quingentos usque ad tempus Artaxerxis regis Persarum: tunc eam revocavit in lucem Ypocras Asclepio patre genitus in insula Choo."

66. Didas., "Dialog. de Rhetor. et Virt." (Patrol. Lat. CI, 947) "Medicina est scientia curationum ad temperamentum et salutem corporis inventa (et locorum)." ^(et locorum)

67. De Univer., XVIII, 5. "Medicina est, quae corporis vel tuetur, vel restaurat salutem: cujus materia versatur in morbis vel vulneribus. Ad hanc itaque pertinent non ea tantum, quae ars eorum exhibet, qui proprie medici nominantur: sed etiam cibus et potus, tegmen et tegumen: defensio denique omnis atque munitio, qua sanum corpus adversus externos ictus, casusque servatur."

The same writer also advised temperance in the use of medicine:

However the name medicine is judged by the method, that is, the moderation placed upon it. Assuredly there is much distress or little delight in a certain character of medicine. Hence, those who drink continually the juice of plants and antidotes are disturbed.⁶⁸

Toward the end of the ninth century, Wikbert, of the see of Hildesheim, said that "in his own time the medical art was at a high point."⁶⁹

There was little differentiation between secular and religious hospitals during this period. In regard to secular hospitals, certain nobles seem to have supported charity hospitals.⁷⁰ The school in or near the palace of Charlemagne must have been a sort of secular hospital for the sick in the neighborhood.⁷¹ Alcuin referred to an institution at which a paralyzed girl sought treatment. His contrast of the efficacy of the remedy received at the hospital with that received on a spot sacred to Saint Euboricencus implies that the establishment was secular.⁷²

68. De Univer., XVIII, 5. "Nomen autem medicinae a modo, id est, temperamento impositum aestimatur. Nam in ea multum contristatur natura, mediocriter autem gaudet: unde et qui pigmenta et antidota satis vel assidue biberint, vexantur."

69. Neuberger, Gesch. der Medizin, II, pt. 2, p. 272. "...in suo tempore medicinal peritissimus erat." Neuberger gives no source reference for this information.

70. Cuissard (op.cit., p. 261) gives Adrevald, Miracula Sancti Benedicti, c. XXIII as his source for this information. This latter work was not available for consultation.

71. Cf. supra, p. 152

72. Cf. supra, p. 119

The majority of hospitals seem to have had a religious connection. It is probable that during the pre-Carolingian period the hospitals like other ecclesiastic institutions suffered. Charlemagne decreed that all hospitals which had fallen into decay should be restored in accordance with the needs of the time, and that a hospital be attached to every cathedral or monastery.⁷³ After Charlemagne there probably was another period marked by widespread abuse and disorder. Hospitals must have suffered in many ways especially through the loss of revenues which were devoted to other purposes.⁷⁴ This misfortune is apparent from a letter to Louis the Pious (circa 822), in which Bishop Victor complained that hospitals were destroyed.⁷⁵ Theodulfe gave a glorified account of his hopes for a hospital (xenodochium) which he had built:

And there that dwelling lies equipped in a mediocre manner and suited to human use. God from his citadel in the heaven visits it because he pities his servants. Let him destroy all adverse things, and let him bring all prosperous things. Here let modesty and truth, piety and probity abound. Let dear faith be present and every evil remain far away. Here let the hungry man find food, the thirsty man drink, the stranger honor, the naked clothing, the weary help, the languid medicine, and the sad joy. Let that house be good to all. Let the father, sitting on a throne, give this home to be dwelt in there. Let it lie open to citizens and to the people and to strangers and to you, so that

73. Capitularia, duplex 803 c.III. This reference was obtained from the article on "Hospitals" in the Catholic Encyclopedia (VII,482); the capitulary itself was not available for consultation.

74. Catholic Encyclopedia, VII,482.

75. Loc. cit.

the love of the brothers and of God may rule always and that all the virtues may meet in this leader. Soon let all harmony follow these virtues, with God's understanding. Let there be no way open to enemy and to cruel treachery. Let justice rule the minds here and let there be plenty and let thirst and hunger be far away. You who seek this place remember, I pray, Theodulfe who built this house with God's help.⁷⁶

Several modern scholars have assigned the foundation of the famous Hotel Dieu at Paris to the ninth century. De Girando said it was established in 800,⁷⁷ Lallemand in 829.⁷⁸

76. Carmina, LIX. (M. G. H. Poet., I, 554.)

"En patet ista domus mediocri exacta paratu,
Utrumque humanis usibus apta tamen.
Quam deus arce poli famulos miserando revisat:
Cuncta adversa fuget, prospera cuncta ferat.
Hic pudor et verum, pietas probitasque redundant,
Sit praesto alma fides, et procul omne nefas.
Esuriens epulas, sitiens potum, hospes honorem;
Nudus operimentum hic reperire queat.
Fessus opem, languens medicamen, gaudia maestus
Hinc ferat, et cunctis consulat ista domus.
Det pater altithronus donum hoc habitantibus istic,
Civibus ut pateat, et peregrini, tibi,
Ut fratrum atque dei regnet dilectio semper,
Virtutesque omnes hac duce convenient.
Quas, miserante deo, mox commoda cuncat sequantur,
Livori et saevis sit via nulla dolis
Ius regat hic mentes, maneatque opulentia rerum,
Et procul adque procul sit sitis atque fames.
Qui petis has sedes, Teodulfi quaeso memento,
Haec qui construxit tecta favente deo."

77. De Girando, De la bienfaisance publique, IV, 248. This work was not available for consultation; the reference was obtained from the Catholic Encyclopedia, VII, 248.

78. Lallemand, Histoire de la Charite, II, 184. This work was also not available, and the material was obtained from the same citation as in note 77 in the Catholic Encyclopedia.

Maisons-Dieu were probably begun during this period.⁷⁹ The names of these institutions bear witness to the emphasis on religion in the early hospitals. The medical establishment managed by Abbot Dido at Sens has been described.⁸⁰ The church councils in the eighth and ninth centuries issued many decrees for medical establishments, and hospices which often served the same purpose. In 743 Carloman at the Council of Leptines commanded that at every convent, a hospice for foreigners be erected.⁸¹ The Synod of Aachen in 816 ordered the same for nunneries. The second Council of Aachen in 836 decreed in the strictest fashion that with every convent a hospice be constructed.⁸² The Hospitalia Scotorum established in France by Irish monks seems to have fallen into decay at the end of the Merovingian period. The Council of Meaux in 845 ordered its restoration.⁸³ It was the policy in all Benedictine monasteries to have an infirmary for the sick. However, not until the Council of Leptines in 742 in the first year of the reign of Pepin and Carloman was the Benedictine rule enforced for all monasteries in Gaul.⁸⁴ Seventy years later, Louis the Pious insisted that the diversity of observation in all the monasteries be reduced to one system.⁸⁵ The infirmary at the Benedictine monastery of

79. Bimbinet, Récherch. sur l'Origine^s de la Méd., p.204.

80. Cf. supra, pp. 145, 146.

81. Sudhoff, op.cit., p.195.

82. Loc.cit.

83. Anon., "Hospitals", Catholic Encyclopedia, VII, 482.

84. Dalton, Greg.of Tours, Hist.of the Franks, I, 367.

85. Loc.cit.

Saint Gall, built by Abbot Gozbert in 830 is the most striking example of an application of this Benedictine principle.

Probably the extant sketch of this infirmary is the oldest existing plan of a monastic infirmary.⁸⁶ The degree of specialization apparent in the arrangement of rooms for this monastery hospital is remarkable. There was a room for bleeding and purging (cella pro sanguine minutis et pro potionatis). The store room (pigmentarium) seems to have been a sort of dispensary and pharmacy combined. The novitiates' quarters for neophyte physicians has received comment. It is possible that the building marked for serious cases (cella valde infirmorum) is intended for patients with infectious diseases, or it may have been only for those who would require immediate attention from the nearby doctor.⁸⁷ The condition of other ninth century hospitals does not seem to have compared favorably with that of the monastery at Saint Gall. It is possible that at some hospitals as many as six lay in the same bed; and that, as soon as a corpse was removed, its place was filled by another sick person.⁸⁸ Bishop Hincmar of Rheims in a capitulary (Capitula

86. It is interesting that the original plan for this hospital is still in existence. It consists of a sheet of parchment, sewed together of four skins; the whole is about three and a half feet long and two and a half feet wide. Cf. Suppan, op.cit., p.387.

87. Suppan (op.cit., p.90) refers to Berendes as making the first conjecture; he himself holds the latter opinion.

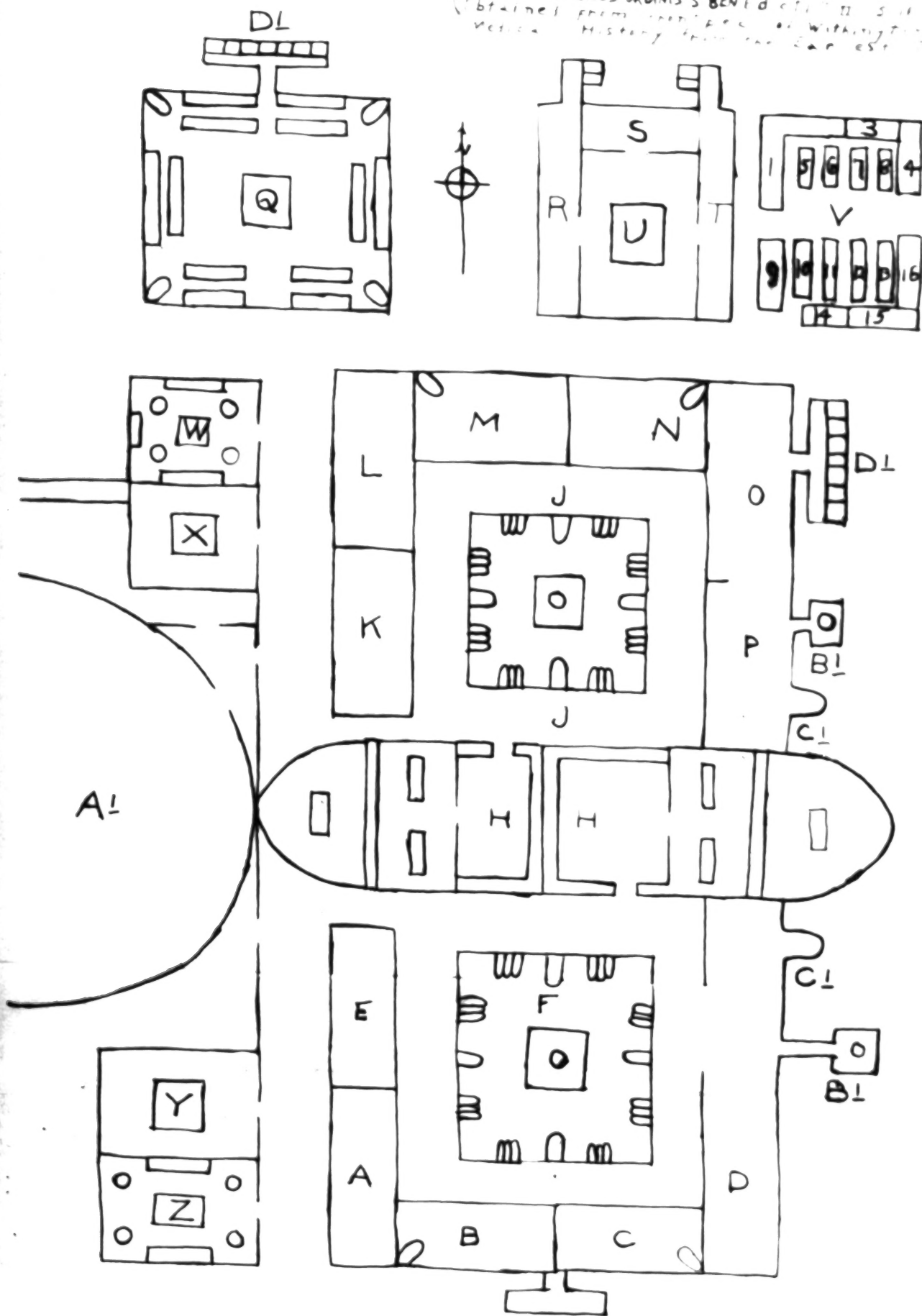
88. Bimbinet, op. cit., p.205.

ad presbyteros) exhorts his clergy to supply the needs of the sick and poor.⁸⁹ This order must have involved some definite establishment for the sick.

89. Hincmari, Capitula Synodica, I,3. "Similiter et ordinem baptizandi ad succurrendum infirmis." The anonymous writer of the article on "Hospitals" in the Catholic Encyclopedia said that there was a hospital at Rheims to which Hincmar assigned considerable revenues. (VII,482)

PLAN OF THE INFIRMARY OF THE MONASTERY OF ST. GALL

BUILT BY ABBOT GOZBERT AD 800 (FROM THE ANNALES ORDINIS S. BENEDICTI S. II)
(OBTAINED FROM THE ARCHBISHOP OF WIPACHTINGEN)
MEDICAL HISTORY FROM THE EARLIEST TIMES



REFERENCE.

- | | | | |
|-------------------------------|---------------------------|---------------------------|------------------------|
| A. Hall | Camera | R. Ward for Serious Cases | Cella Valde Infirmorum |
| B. Superintendent's Room | Cella Magistri | S. Store Room | Plimentarium |
| C. Patients' Room | Cella Infirmorum | T. Doctor's Apartment | Mansio Medici |
| D. Dormitory | Dormitorium | U. Doctor's House | Domus Medicorum |
| E. Refectory | Refectorium | V. Physic Garden | Hortus Medicus |
| F. Novices' Quarters | Cella Novitiorum | W. Bath Room | Balnea |
| G. Warm Room | Pyrale | X. Infirmary Kitchen and | Coquina Infirmorum et |
| H. Infirmary Chapel | Ecclesia Infirmorum | Place for Blood Letting | Locus Sanguinis |
| J. Infirmary Portico | Porticus Infirmarum | Y. Novices' Kitchen | Coquina Novitiorum |
| K. Hall | Camera | Z. Novitiates' Bath Room | Balnea Novitiorum |
| L. Refectory | Refectorium | | |
| M. Superintendent of Patients | Domus Magister Infirmorum | | |
| N. Ward of Serious Cases | Cella Valde Infirmorum | | |
| O. Dormitory | Dormitorium | | |
| P. Warm Room | Pyrale | | |
| Q. Room for those Let Blood | Cella Pro Sanguine | | |
| or Purged | et Pro Potionibus | | |

- | | | | |
|-----------------------|----------------------------------|-------------|-------------------------------|
| No. 1. Rose | No. 5. Hedge Mustard (Eisymbria) | No. 9. Lily | No. 13. Pennyroyal (Pulegium) |
| 2. Bean (Phaseolus) | 6. Onion | 10. Sage | 14. Mint |
| 3. Savory (Sua Regia) | 7. Lybeticum | 11. Rue | 15. Camphor |
| 4. Costus | | 12. Cardus | 16. Sassafras |

PART III

COMPARISON OF MEROVINGIAN AND CAROLINGIAN MEDICINE

The Merovingian and Carolingian sources to describe general diseases: *varicella*, *infectio*, *influenza*, *cholera*, *scorbutus*, *typhus* and *leprosus* appear in both; *varicella*, *infectio*, *influenza*, *cholera*, *scorbutus* and *typhus* are found in only the Merovingian works, and *leprosus*, *infectio*, *influenza*, *cholera* and *scorbutus* are found only in Carolingian writings. For pain in a specific part of the body are used in both sources: *lumbus* only in the Merovingian; and *caput* and *pedes* only in the Carolingian. To indicate general condition both the Merovingian and Carolingian writers used *sanitas*; only the Merovingian used *salus* and *sanitas*. *Sanitas* and *sanitas* were used by both to describe the state itself; *sanitas* and *sanitas* only by Merovingian authors; and *sanitas* only by Carolingians. The condition of the patient is indicated in both sources by *sanitas*, *sanitas* and *sanitas*; in only the Merovingian by *sanitas*, *sanitas* and *sanitas*; and in only the Carolingian by *sanitas*, *sanitas*, *sanitas*, and *sanitas*.

CHAPTER V

Conclusions

It is clear that many of the same terms were used in the Merovingian and Carolingian sources to connote general diseases; morbus, infirmitas, infirmus, aegrotudo, aegrotare, humor and languor appear in both; valetudo contraria, valetudo maligna, debilitas and incommodus are found in only the Merovingian works, and aegrotus, languet, languidus, valetudo adversa, valetudo imbecilla corporis, invalidus, egrotis and clinica are found only in Carolingian writings. For pain in a specific part dolor and laboro are used in both sources; labor only in the Merovingian; and passio and aegrus only in the Carolingian. To indicate general remedies both the Merovingian and Carolingian writers used remedium; only the Merovingians used medela and agridium. Cura and medeor were used by both to describe the cure itself; curo and succurro only by Merovingian authors; and medico only by Carolingians. The resultant health was indicated in both sources by sanus, sanitas and valetudo; in only the Merovingian by sopitas, salus and salubritas; and in only the Carolingian by salutus, sanatus, salubrior, and saluberrimus.

Merovingian sources were brief in regard to general diseases and remedies. No general theories of causation were expounded. On the other hand the Carolingian sources contain abstract theories of disease, its causation and remedies. Raban defined disease as a term which included all bodily suffering. He expounded in detail the well-known theory of the humors as a cause of disease. He even mentioned urine as a barometer in health. In contrast to these physical explanations of disease was Raban's association of disease with spiritual weakness. His division of diseases (derived from Ildore of Seville) into acute and chronic has survived to the present. It is noteworthy that his designation of gout and consumption as chronic, and pleurisy and delirium as acute, are sound. The idea of differentiation of remedies is found in both Merovingian and Carolingian works; however, it appears more often in Carolingian sources. Apparently some form of simple surgery was employed in both periods, but anesthetic (mandrake) seems only to have been employed during the Carolingian. Bleeding does not seem to have been used as generally in the Merovingian period as in the Carolingian; at the latter time it was followed by a purgative or some such decoction as ambrosia tea. Such general remedies as prescriptions, bitter and sweet drugs, the famous sacred drink mixed with ashes in wine, consecrated herbs and holy oil were used; ^{in the Merovingian period} general remedies employed in the Carolingian period were drugs, unguents and waters. Prayers and rubrics seem to have accompanied the administering of remedies

in both periods. Gregory in the Merovingian period spoke scornfully of incantations; the Carolingian writer, Halitgarius definitely forbade the use of formulas which were not related to Christian worship. Drugs used as general remedies in Carolingian times were casia, cinnamon, a compound of which aurichalcum was an element, a material obtained from trees in Parthia, rose, sage, rue, lovage; of these, rose, sage, rue and lovage are known to have medicinal properties. In consideration of general spiritual remedies, prayer to saints for their intercession in healing seems to have occurred in both periods. In the Merovingian sources there are more references to miraculous cures of the saints than in the Carolingian. Saint Martin was patronized at both times; Saint Julian and Saint Medard⁷ ^{were mentioned} only in Merovingian works; and Saint Dionysius only in Carolingian sources. Certain ointments - clay and rosin- were mentioned by the Carolingian writer, Raban, as divine medicine; of these only the rosin could have medical value. A definition of health was expounded by Raban in which he said that health was determined by the status of the blood. No attempt to explain health is found in Merovingian sources; but, since spontaneous bleeding of corrupted blood often accompanied miraculous cures, it is possible that a connection existed between the condition of the blood and health in the minds of Merovingian writers.

Considering specific diseases, it is apparent that both the Merovingian and Carolingian Franks suffered from the following contagious diseases: dysentery, ergotism, leprosy,

and various fevers. Accounts have been found in only the Merovingian sources of diseases resembling the bubonic plague, meningitis, tuberculosis, and smallpox. In both periods there was annoyance from such non-contagious diseases as insanity, paralysis, eye diseases, ear disorders, muteness, stomach disorders, gout, heart disease, renal diseases, wounds, and accidents, headache, cold and sore throat, and minor skin infections. In only Merovingian works are there references to nervous diarrhea, jaundice and stones, phlebitis, blood-poisoning, toothache, menopause and infections of the feet; in Carolingian works only there are allusions to constipation, diseases of the bladder, dropsy, lameness, malformations - as rent tongue, crushed hand, twisted nose, and broken testicles - stricture, sunstroke, snake bites, poisoning, carbuncle of the chest, tumor of the right groin, asthma, pleurisy, hunchback, ulcer of the stomach, abortion and sterility.

For plagues the general terms lues, pestilentia, contagium and pestis appear in both sources; clades glandolaria, clades and horror only in the Merovingian; and plaga and pestifera only in the Carolingian. In regard to specific terms for contagious diseases it is found that in both sources ignis coelestis probably referred to ergotism, leprae to leprosy and febris to fever; dysentericus described dysentery in Merovingian works, while dissenteria and venter incommodus connoted the same disease in Carolingian. In only Carolingian sources plaga magna vesicarum was used for ergotism, and leprosi for leprosy.

For contagious diseases which were mentioned only in Merovingian sources one finds the term inguen for bubonic plague; and tertianae febres for tertian fever, typus frigoris and frigorigenicus for fever beginning with a cold. In consideration of non-contagious diseases, it is found that none of the same terms for general insanity occurred in Merovingian and Carolingian works. In the Merovingian period energumenus and inergumenus connoted the possession of demons; spiritus malignus, an evil spirit; and spiritus immundus, an unclean spirit. In the Carolingian sources insania indicated insanity; furiales and lymphaticus, madness; and phrenesis, delirium. Epilepticum and cadivium were used for epilepsy in Merovingian writings; comitales in Carolingian. In both periods paralysis described paralysis; debilitas was used only in the Merovingian, and paralyticus and contusio laxis membris only in the Carolingian. For blindness caecus was used at both times; caecitas and tenebrosus only in the Merovingian; and tenebrae and umbra oculis only in the Carolingian. In both periods gurdus connoted deafness; tinnitum aures, praeclusione aurium and calustreae aures were used only in the Merovingian. Mutus indicated muteness in both Merovingian and Carolingian works. Dolor ventris was employed for stomach disorders in both periods; morbus stomachus only in the Merovingian. Fastidius indicated nausea in Merovingian sources; nausia meant the same malady in Carolingian. Podagra was used for gout by both Merovingian and Carolingian

writers; humor chiraagricae and humor pedum only by Merovingian; and dolor pedum, morbus pedum, and uno pedo claudico only by Carolingian. For heart disease tremor cordis is found in a Merovingian work; and aegrus pectoris in a Carolingian. The writers of both periods used dolor renium for kidney diseases; and dolor capitis for headache. Merovingian authors referred to throat disorders as dolentia gula; Carolingian by the term raucedo fauce. Frigor connoted a cold in Merovingian works; tussim indicated the same idea in Carolingian. For minor skin infections pustula, ulcus and ulcera were used by Merovingian writers; impetigo and scabies by Carolingian. In reference to non-contagious diseases which were described only in Merovingian sources, one finds that fluxus ventris and immoderatus fluor were used for diarrhea; dolor oculorum, lippitudo oculorum, spiculum oculorum for pain in eyes; caligo oculorum, cutis oculis and cataracta oculorum for cataract; morbus regius calculisque for jaundice and stones; dolor dentis for toothache, and maxilla intumescens for swollen jaw; and pedum infectum for infections of the feet. The specific terms used only for non contagious diseases in Carolingian sources were unda diffusa sanguines for apoplexy; lippus oculis or merely lippus for blar eyes; auris abscissa for split ear; tumor ventris for ulcer of the stomach; stomachus morantus and venter mora for constipation; dolor vesicae for bladder disease; hydropicus for dropsy; anhela for asthma; pleurisis for pleurisy; tissis for consumption; claudus for lameness; gripperosus for hunchback;

lingua abscissa for rent tongue, manus fracta for crushed hand; nasus tortus for twisted nose; testiculis confractus for broken testicles; tricae torquentae for stricture; aestus solis for sunstroke; venenum for poison; carbunculus pectore for carbuncle of the chest; pustula dextra inguine for tumor of the right groin; vertigo for vertigo; abortus and abortio for abortion; and sterilitas and sterilus for sterility.

An analysis of causes, symptoms and remedies for specific diseases reveals many interesting facts and possibilities. After a consideration of contagious diseases, it is clear that there were occurrences of the bubonic plague in Arles in 552, in Auvergne in 571, at Narbonne in 582, in Marseilles and the Lyonnaise in 587, in Burgundy in 588, in Avignon and Viviers in 590, and again in Marseilles in 591. The cause - "tinder" from the ships from Spain- and the description of symptoms reveals some insight into the bubonic plague on the part of Gregory. In regard to remedies, Gregory admitted that spiritual intervention was powerless except as a temporary prophylactic measure. Of the three physical remedies tried, one- a barley bread diet - could be beneficial; the other two - oil treatment for cattle and draughts for humans, could be of little medical value. Undoubtedly, a number of the more robust inhabitants of Merovingian Gaul were able, through their inherent physical strength, to recover from this plague. However, the majority of the victims died.

Epidemics of dysentery seem to have occurred intermittently in Gaul from 572 to 591, and again in 820. The specific

places visited by this plague were widely separated from those attacked by the bubonic; excluding the attacks on the soldiers in Italy and Pannonia, the outbreaks were in central and northern Gaul, whereas the bubonic plague centered in the South. Phenomenal geographic conditions foretold an attack of dysentery. It is possible to rationalize each of Gregory's causes for dysentery - hidden pustules, sores around the heart, and malarial air; and, although Gregory probably knew little of the reasons for his assertions, the analogy between his statements and modern concepts is interesting. In the Carolingian period Aginhard revealed an equally sound idea of causation for dysentery - unhealthiness of the water. Relief could have been obtained from four of the remedies mentioned by Merovingian writers - the sacred wine drink, holy oil, an herb concoction, and the cooling winds and rain; from one - bleeding - there could have been no real therapeutic value. Cases of chronic dysentery were described in the works of both periods.

It is clear, from both the terms and the ideas used in the descriptions of diseases of the bladder in 582 and the malady of Felix, the bishop of Nantes in the same year, that this plague was ergotism. The description of a plague in 857 on the upper Rhine definitely indicates it also to have been ergotism. The only cause mentioned in the Merovingian and Carolingian sources - celestial fire - was spiritual. The account of symptoms in the pestilence of 857 is full; it is interesting that an internal physiological phenomenon - diseased

condition of the bladder is mentioned.

The people of the Merovingian period seem to have believed that leprosy was a punishment of God to the sinful. A spiritual idea of causation was also mentioned in Carolingian works. Raban even differentiated between nine types of leprosy, the particular nature of the disease depending on the type of sin committed by the victim. The symptoms described in Merovingian works are somewhat in accord with modern medicine. A spiritual remedy - prayer - was cited in a Merovingian account. Segregation, enforced by legislation, were employed during both periods; a similar mode of treatment is used effectively today. Cleanliness was an added provision in the Carolingian laws concerning lepers. Salves were also used in the Carolingian period; it is possible that this treatment could also have medical value.

It is probable that the fevers from which the people in Merovingian Gaul suffered were typhoid, influenza, dengue, and malarial fevers. No differentiation in types of fevers appears in Carolingian accounts. The causes of fevers, as interpreted in Merovingian and Carolingian accounts, were spiritual - either they were the work of the devil or the result of sin of the individual. None of the symptoms described in Merovingian writings, except those for malarial fevers, are significant. The symptoms for malarial fevers reveal a knowledge of the trembling and remittent character of such fevers. No definite symptoms were mentioned in Carolingian works. Of the remedies described by Merovingian authors, three-

the sacred wine drink, the consecrated oil and herb sage could have efficacy on the basis of known medical facts. The other three - prayer, a drink in which the fringe from the garment of king Gunthram was placed, and the wrapping of the chasuble of abbot Severinus- could have no therapeutic effect, but the patient could have felt relief from a paroxysm of fever at the time the supernatural remedy was administered. The use of material sacred from its royal contact is interesting for its similarity to the later idea of the "kings touch" as capable of healing disease. The Carolingian authors referred to medical herbs in general, wormwood and santhem wood in particular, as remedies for fever. Of these, only the general herb remedy could be effective.

In reference to the Merovingian contagious diseases which correspond to modern meningitis, smallpox and tuberculosis, the cause of meningitis was said to be divine anger. The description of symptoms was brief, and no remedy was mentioned. No cause was cited by the Merovingian writer, Gregory, for a plague which is thought to have been either smallpox, or gonorrheal infection. The symptoms are too brief for classification. The only remedy described was spiritual - purification by means of sacred water from the tomb of Saint Martin. Obviously this remedy could have no medical value. No cause was cited in a Merovingian account of a disease which seems to have been tuberculosis of the thigh, and the description of symptoms are brief. The surgical treatment employed could have been beneficial.

Mention was made of a similar disease by a Carolingian writer (Raban), but he gave no details of causation, symptoms, or remedies. Several of the plagues described in Carolingian sources defy diagnosis. One of these, like many of the plagues in the Merovingian period, was said to have been preceded by such portents as fire, earthquake, damp air, hail stones of great weight and lightning. For it, a physical causation-climatic conditions - was given. Some sort of treatment, the details of which are not furnished, was employed for these pestilences.

In regard to non-contagious diseases, such as insanity, it is found that many spiritual causes were related by both Merovingian and Carolingian writers. Merovingian authors attributed such misfortunes to demons and sin in general; the Carolingian writers to a definite type of sin. Yet physical causes were also cited for insanity. In Merovingian sources alcoholism and heredity (as a result of sinful parents) were mentioned; both of these factors are recognized as significant in mental disorders today. In Carolingian works mention was made of a natural cause- an impediment of the mind - for delirium. Absurd physical causes - a Boetian lake and the Red Spring in Ethiopia - were cited for madness. Hence, the Merovingian ideas of causation for insanity compare more favorably with modern interpretation than the Carolingian. It is possible that constant intermarrying within families, and the nervous strain of the cloistered life adopted by so many, explains the

prevalence of mental diseases in Merovingian and Carolingian Gaul. In the Merovingian sources the descriptions of symptoms for insanity are fantastic and absurd. On the other hand, Carolingian accounts of symptoms reveal some degree of observation. All the remedies described in Merovingian works were spiritual. It is easy to understand the efficacy of spiritual remedies for nervous disorders. Such treatment is equally effective today. In the Carolingian sources physical remedies - sulphur soil from the island of Samos and heated wines, certain waters, and a decoction of poppy - were mentioned. Of these, the wine might be beneficial, the waters could have a constructive psychological effect, and the poppy (containing opium) would give immediate temporary relief. In the Merovingian accounts of diarrhea the case described by Gregory shows more careful attention to symptoms than that of Walafrid. The only remedy mentioned - a sacred potion - could have been helpful.

A large number of the inhabitants of Merovingian Gaul suffered from apoplexy and paralysis - or a sort of pseudo-paralysis - of the tongue, of the throat, of the arms, of the legs, and of the whole body. The parts affected by paralysis are not so clearly described in Carolingian sources. The Merovingian writers give four causes for paralysis. One was spiritual; another, the idea that paralysis was a punishment to the children of voluptuous parents, is both physical and spiritual. The other two - contraction of the tendons producing leg and arm paralysis, and humors as a determining factor in paralysis of the legs - were physical. None of these theories

of causation is sound from the point of view of modern medicine. The only cause cited by a Carolingian writer for paralysis was spiritual - the soul of a paralytic was said to be destroyed by vices. The Merovingian accounts of symptoms reveal nothing particularly remarkable. Such a conspicuous feature as paralysis of the various parts would be noticed by the most unscientific. Gregory's accounts are more specific than those of Walafrið. Probably a number of the diseases described as paralysis were only hysteria, rheumatism or arthritis. Carolingian versions of paralysis are too brief for comment. The majority of remedies mentioned in Merovingian works for paralysis were spiritual. In the cases of which paralysis is a doubtful diagnosis, miraculous cures are explicable, for nature could have effected a cure. A physical element was present in some of the spiritual cures - sacred oil, bleeding from the blood of God, and a combination herb appliance and sacred oil. Of these, the only treatment which could possibly have been beneficial was sacred oil. In the Carolingian period Walafrið recommended both prophylactic and therapeutic methods of treatment for paralysis - a taste of chevril to prevent apoplexy, and a poultice of lily for paralyzed limbs.

Apparently, there were many cases of eye diseases in Merovingian Gaul. Probably these people suffered from such maladies as cataract, inflammation of the retina, brain disease, congenital blindness from gonorrheal infection, bright's

disease or diabetes. Certain physical causes were cited for blindness in Merovingian works. Of these two - that of the fever mentioned by Gregory, and the congenital factor suggested by Walafrid are plausible; one considered by Walafrid - that a skin formed over a man's eyes as a result of his having been struck by lightning, is absurd. Both Gregory and Walafrid clearly show that they believed blindness was the result of sin. Probably they deemed physical factors mere chance accompaniments of spiritual influences. In the Carolingian period Raban attributed eye diseases to specific types of sin; Walafrid, however, suggested a physical cause - sap from lovage. The only symptom recorded in Merovingian works which is noteworthy is that mentioned by Gregory in his account of the two blind men from Bourges; he said that their lids were dry. No symptoms were mentioned for eye diseases in Carolingian works. In this passage, Gregory shows rather close attention to symptoms. The spiritual cures in Merovingian accounts seem to have been exaggerated for there is little which is curable, and cataracts cannot be removed except by operation. The only physical remedy mentioned in any Merovingian work was bleeding, which, as even Gregory pointed out, could not have been effective. Three physical remedies were described for eye diseases in Carolingian sources; the fountain of Cicero, unguents and the herb, fennel. Of these the unguent could have been effective for sore eyes; but it was asserted to have cured blindness. The other remedies could have had only psychological effect.

In regard to ear disorders and muteness, it is probable that much of the so-called deafness described in Merovingian sources was due to a local infection and, therefore, temporary. No ideas of causation or symptoms were related in these works. In Carolingian writings, ear diseases were positively associated with particular kinds of sin. Spiritual cures for deafness were related by Merovingian writers; these could not have been effective in cases of true deafness. In regard to the causation for muteness, the congenital influences implied by one of the Merovingian writers, is plausible for it is possible for a child to be born mute. In Carolingian sources, muteness, like ear disorders, was attributed to a special type of sin. Spiritual cures were described by Merovingian authors; these seem to have been exaggerated or false for true mutes are seldom cured. Possibly many of the persons considered mute were actually timid or hysterical; these could be aided by psychological treatment. It is also possible that some of the so-called mutes had laryngitis, and were relieved without treatment in the course of time. No further details were furnished by Carolingian writers concerning muteness.

The Merovingian and Carolingian accounts of stomach diseases reveal no concepts of causation. Merovingian narrations furnish no details of symptoms; in the Carolingian, there is a differentiation between dyspepsia, biliousness, boils of the stomach, and griping of the bowels. All the remedies mentioned in Merovingian works - wormwood, massage, fasting, followed by

a wine tonic, and religious panacea (obtained through prayer at the tomb of Saint Gall)- are plausible in the light of modern medicine. It is interesting that there was a spiritual element in all of these remedies except wormwood. The remedies prescribed by the Carolingian poet, Walafrid, for stomach disorders were preparations of parsley to prevent dyspepsia, a decoction of poppy or horehound for relieving dyspepsia; a preparation containing parsley for biliousness; fennel for boils of the stomach; powdered agrimony, and a poultice of chevril, poppy and leaves of pennyroyal for griping of the bowels. Of these, horehound, fennel and agrimony could have relieved patients. It is interesting, however, that both poppy, parsley, and pennyroyal are used medicinally today.

In accounts of constipation, Carolingian writers furnish no theories of causation or descriptions of symptoms. As remedies, Walafrid suggested a poultice or draught of pennyroyal, fennel and root of costmary; of these only costmary would act as a purgative.

In Merovingian works, no theories of causation for gout were attempted. A hint of an explanation for gout may be found in the association of gout with opulence in Carolingian writings. Such an idea can be rationalized to rich diet, a recognized factor in gout today. The symptoms recorded by Merovingian writers were rather complete. The only detail of symptoms found in Carolingian sources was that it was a chronic disease; such a classification is found. Remedies

suggested by Merovingian authors were both physical and spiritual. Of the physical, two - the hot iron and baths - could be beneficial; one - fumes from the heart and liver of a fish - was only of psychological value. Spiritual cures in the Merovingian accounts for gout can possibly be explained by a coincident change in diet, or by Gregory's untrustworthy sources of information. Carolingian writers mentioned dietary regulation (roasted meat instead of boiled) and baths, as treatments for gout. Although the actual change of diet recommended by Carolingian doctors could not have been helpful, the association of dietary control with curing gout is noteworthy. The efficacy of baths in treating gout has been mentioned. No idea of causation or description of symptoms is found in the Carolingian account of disorder of the bladder. The remedy prescribed for it by Walafrid - a preparation of cornflag - was probably of no medical value.

In descriptions of heart disease neither the Merovingian or Carolingian writers reveal any concept of causation. The recognition of such an internal physiological phenomena as heart disease is noteworthy in these periods; however, the reports may not be authentic. Condemnation of such physical remedies for heart disease as herbs and bandages is found in Merovingian works, and a spiritual cure was described. It is impossible to estimate the therapeutic possibility of this herb remedy, since its constituents were not mentioned. Bandages could be of no medical value. As heart attacks - if they are

not fatal- are of short duration, a miraculous cure can be explained. In the Carolingian era, Walafrid prescribed a physical remedy - horehound - for heart disease. The context of this account indicates that Walafrid may have referred to the heartburn characteristic of indigestion; if this hypothesis is correct horehound would be beneficial.

In the Merovingian account of a disease which seems to have been phlebitis, the association of the disease with childbirth is interesting, for today a relationship between the two is recognized. A spiritual cure was described for the disease. Since the malady can be corrected without treatment such an idea can be understood.

In descriptions of kidney diseases Merovingian writers gave hints of a spiritual cause- an attack of a demon, while the Carolingian author, Eginhard, associated this malady with a physical factor - his former illness. Symptoms were explained in more detail in Carolingian works than in Merovingian. Only spiritual remedies were mentioned in Merovingian sources; no remedy was prescribed in the Carolingian. Since recovery from certain kidney diseases is possible without treatment, these spiritual cures can be rationalized.

In a reference to a malady which probably was blood-poisoning, Walafrid- a Carolingian hagiographer, writing about a Merovingian saint- hinted that infection was the cause of blood-poisoning. The symptoms mentioned rather clearly indicate the nature of the disease. A cure was supposedly accomplished with consecrated oil; such a remedy could be of

no medical value. However, it is possible that the man with bloodpoisoning could throw off his infection without treatment. Another disease of the circulatory system- dropsy (referred to only in Carolingian works) was associated with avarice by both Raban and Halitgarius.

In regard to diseases of the respiratory system, it is found that Merovingian sources contain no reference to causation, but in a Carolingian work there is a definition of a cold which implies that it is due to bodily fevers. The definite cause of colds has not been determined to the present time. No symptoms were mentioned in the works of either period. In the Merovingian period, a spiritual remedy - sacred water from the tomb of a Saint, was prescribed. On the other hand, in the Carolingian period, physical remedies of both a prophylactic and therapeutic character were employed. Walafrid prescribed a rich soup of fennel, and root of radish as preventives and peppermint as a curative agent. Of these, only the peppermint could be helpful; it would provide temporary relief. No assignment of cause or description of symptoms accompanied the Carolingian account of pleurisy. Charlemagne, the victim, tried fasting as a treatment, and died. Such a remedy would be distinctly harmful to a patient with pleurisy.

The treatment of wounds seems to have received careful attention during both the Merovingian and Carolingian periods. It is probable that the Merovingian people were acquainted with effective methods of treating open cuts, and that

cauterization was the method of treatment used. In the Carolingian period probably care was observed by intelligent people to avoid infection. Surgical methods were employed. An interesting way of healing wounds - curative waters- was suggested by Raban. Walafrið described the curing of wounds by preparations of betony, catmint, saffron wood and agrimony. Only one of these concoctions could have been beneficial- the treatment of agrimony and vinegar; vinegar would act as an antiseptic. In regard to miscellaneous diseases, no direct mention was made of sunstroke in Merovingian sources, but the allusion to an attack of a noonday demon on a woman working in a field may refer to sunstroke. No symptoms were mentioned in either Merovingian or Carolingian accounts of this misfortune. The woman attacked by a noonday demon was cured spiritually. The Carolingian poet, Walafrið, prescribed pennyroyal as a remedy. This herb remedy could be of no medical value to a victim of sunstroke. For snake bites, Walafrið advised a compound of lily and wine. It is possible that scrapings from the books of missionaries were also used for snake bites at this time. Wine could act as a circulatory stimulant, and, hence, be beneficial after a snake bite; but the other remedies could be of no medical value. For malicious poisoning, Walafrið suggested a concoction of horehound or rue. Neither of these could be effective antidotes.

In reference to minor skin eruptions, a spiritual cause is found in Carolingian sources; no cause was mentioned in the Merovingian. Symptoms as described in Merovingian works

are too brief for comment, and there are no allusions to symptoms for this malady in Carolingian writings. The cures mentioned by Merovingian authors were spiritual. Two- sacred oil and unguents - could be beneficial; the other- a piece of sacred garment from the tomb of Saint Martin- could be of no medical value. Spiritual cures for skin eruptions are explicable for these often disappear without treatment. No remedies were described for this affliction in Carolingian works.

Considering abnormal growths, Walafrid, in the Carolingian period, advised a decoction of poppy for a carbuncle of the chest. No further details of the case were given; it is probable that he referred to an abscess of the lung which could be healed without treatment. Opium from poppy would relieve any sort of pain temporarily, but would be of no permanent value. No medical facts were revealed in the Carolingian account of a tumor of the right groin.

In descriptions of various minor ailments, such as headache, the sources of both periods furnish information on remedies. A Merovingian writer described a spiritual cure- touching the head by the sacred pall from the tomb of Saint Martin. Carolingian authors suggested physical remedies- a small drink or a poultice of wormwood. None of these remedies could have any medical value. However, since headaches often disappear without medical aid, the medieval concept of cures for headache is easy to understand. Absurd spiritual remedies were described in Merovingian sources for toothache - a piece of plank, wax from sacred tapers, and wattle twigs from the covering of a saint's tomb. The sacred pall from the tomb of Saint

Martin was considered as effective for relieving a woman suffering from what seems to have been a menopause in the Merovingian period. In regard to another of the minor afflictions, it is interesting that the Merovingian writer, Gregory, attributed infections of the feet to physical causes- long standing, and grievous humors. In regard to abortion and sterility, evidence in Carolingian sources indicates that abortion was illegal, according to secular and canon law. Raban said that the fountain of Lechnus permitted abortion to take place; such an idea is ridiculous. An account of sterility shows two significant ideas: recognition of a physical basis for sterility, and an association of it with menstruation. It is strange that Raban recorded these physiological facts, and yet wrote in another passage that certain waters controlled sterility.

In conclusion, for Merovingian and Carolingian diseases, it may be said that of the twenty-six references to causation for different diseases, ten, or 38.4 percent were spiritual and sixteen or 61.5 per cent were physical. Of the physical causes twelve, or 46.1 per cent of the theories of causation, have some basis on known medical facts. In regard to the nineteen causes listed in Carolingian works, eight or 42.1 per cent were spiritual, and eleven or 57.8 per cent were physical. Seven or 36.3 per cent of these varied ideas of causation are plausible. From these figures it would seem that Merovingian concepts of causation reveal a slightly higher probability of accuracy than Carolingian. However, none of the

Merovingian theories compare in wisdom with the association of disease with the condition of the blood and urine as expressed in the Carolingian period. The famous theory of humors is never adequately explained in a Merovingian source, while a complete explanation of it appears in the Carolingian De Univero. General symptoms were more complete in Merovingian writings than in the Carolingian; it is easier for a modern physician to recognize diseases from a Merovingian account than a Carolingian. General remedies employed in the Merovingian period reveal a more decided religious influence than those of the Carolingian; there is more evidence of seeking saintly intercession for healing than in the Carolingian. Of the sixty Merovingian accounts of remedies fifteen or 25 per cent were purely spiritual; twenty-eight or 46.6 per cent were spiritual and physical - that is, although a physical substance was used, their popularity lay in the fact that they were considered blessed by a saint or by God; and sixteen or 26.6 per cent were purely physical. In other words, forty-three or 71.6 per cent of the Merovingian remedies had a distinctly spiritual connotation. Nine of the diseases treated spiritually were diseases which could be cured without treatment. However, it is interesting that of the twenty-eight semi-spiritual remedies, fourteen or 50 per cent could have been beneficial; six or 21.4 per cent were advocated for diseases which are often cured without medical aid. Hence, twenty-nine or 67.6 per cent of the ^{spiritual} type of remedies have a rational explanation. Of the sixteen physical remedies

mentioned in Merovingian sources eleven or 68.7 per cent could have efficacy in the light of modern medicine; two or 12.5 per cent were for diseases which do not necessitate intelligent medical treatment for healing. Hence, of the sixty Merovingian remedies twenty-five or 41.6 per cent could be actually beneficial; fifty-four or 90 per cent have a rational explanation. In Carolingian works, there is a record of fifty-three remedies: two or 3.7 per cent were spiritual; three or 5.6 per cent were semi-spiritual; and forty-eight or 90.5 per cent were physical. Not enough detail is furnished for spiritual remedies to know whether they were applied to diseases from which the victim recovered naturally; only one or 33.3 per cent of the semi-spiritual remedies was administered for such a disease. Of the physical remedies, twelve or 22.6 per cent could be effective according to modern judgment. Hence, thirteen or 24.5 per cent of the remedies could have been effective. Probably only one- Charlemagne's fasting for pleurisy- was actually harmful. The ratio between the efficacy of Merovingian and Carolingian remedies, as in the causes, is deceptive. Carolingian remedies reveal a greater knowledge of materia medica and surgery than the Merovingian wines and unguents which were used for most of the diseases in that period.

In regard to doctors it is found that lay doctors were numerous and of diverse types in Merovingian Gaul; there were royal physicians, doctors educated at Constantinople, Jews, quacks and women. On the other hand, the Carolingian sources rarely refer to secular doctors per se; the majority of

doctors in this period seem to have had some sort of religious association. Medicus is the only term connoting doctor found in both Merovingian and Carolingian works. Merovingian writers used archiater for royal physician, Judaeus for Jewish doctor, and ariolus for charlatans. The only new term for doctor in Carolingian sources is physicus. In the Merovingian period, the training of the court physicians was varied- Roeval was educated at Constantinople; Marilef came up from the ranks. Roeval probably knew more of classical and oriental medicine. In the Carolingian period court doctors seem to have obtained technical training in or near the royal palace. It is evident that Merovingian royal physicians, dependent on the caprice of the ruler whom they served, led a precarious existence. Often they were forced to connive in unscrupulous schemes. Two of them were killed for their failure to cure a spiteful Queen; but, from Gregory's remarks on this subject, such a procedure was not popular and, hence, probably not general. Few details concerning the personal experiences of Carolingian royal doctors are found. Apparently royal physicians in both periods acquired a certain amount of wealth. References to Jewish doctors appear seldom in the sources of either period, but in these occasional references these doctors seem to have despised their Christian rivals. The Jewish doctors themselves were probably regarded with suspicion in both periods. The Merovingian writer, Gregory, referred to a Jewish doctor as an "ancient serpent"; in 877 a Jewish doctor was suspected of poisoning Charles the Bald. From the available evidence it seems that few Merovingian

doctors were considered as quacks. No charlatans were mentioned in the Carolingian sources. Several women are cited by Merovingian chroniclers as active participants in treating the sick, and midwifery was doubtless usually assigned to women (special runes may have been used to facilitate the delivery of children). No women were mentioned as active in medical work in Carolingian sources.

In the Merovingian period the supernatural healers included deceased Christian saints, holy Christian men and women, and possibly pagan gods such as Odin. The curative powers of the various saints were usually differentiated. Saint Martin, Saint Gall, and Saint Julian, the martyr, were specifically mentioned for their general therapeutic ability. If one can trust the completeness and authenticity of the accounts of Walafriid and Gregory, the healing ability of Saint Gall was not as varied as that of Saint Martin. In contrast to the Merovingian authors, the Carolingian rarely refer to healing by deceased saints. Saint Martin was still patronized, however, and Saint Dionysius, the martyr, also inspired confidence for his healing powers. Carolingian authors frequently mentioned practicing monastic physicians; there were no such allusions in the Merovingian works. In this period, the holy men who performed miraculous cures in Merovingian times may have been the prototype of the Carolingian monastic physician. By the Carolingian period the supernatural element was not nearly so prominent in the cures administered by these doctors. Among the holy men who were active in the healing art in the Merovingian period were Abbot

Severinus of Jura, the priest Julian of Auvergne; Domnolus, bishop of Le Mans, and Aredius of Tours. Such clerics often assisted in treating the sick. The monastic physicians conspicuous for their medical ability in the Carolingian period were the itinerant Abbot Dido of Sens and Iso of the monastery of Saint Gall.

The relation in the Merovingian curriculum of medicine to the liberal arts is not even hinted at in the available sources. On the other hand, an analysis of Carolingian sources indicates that medicine was a branch of physics which was considered of equal importance with the subjects of the quadrivium and trivium. No details were furnished in regard to the education of Merovingian doctors except in the case of Roeval who was educated at Constantinople. Carolingian doctors seem to have been able to acquire a theoretical, popular, practical, and specialized training. Extant laws of this and earlier periods show that young men were ordered to study medicine. It is probable that this law was more rigorously enforced under the strong government of the early Carolingian rulers. Such classical scholars as Hippocrates, Galen and Pliny were studied. Rumor and gossip disseminated medical information. The infirmary described near or in the palace of Charlemagne and the hospital at the monastery of Saint Gall gave special and practical training to young doctors.

According to the Merovingian chroniclers the equipment which the doctors of this period used was the cupping glass, the sponge, metallic bandages and surgical instruments.

Carolingian writers referred to more varied types of surgical instruments, and to linen bandages.

No particular information is furnished in Merovingian accounts of the traits of character of doctors. Carolingian writers reveal humility, solicitude, generosity, and delicacy on the part of contemporary doctors. The doctors' disapproval of pagan formulas in administering remedies is clearly expressed.

In regard to the attitude of Merovingian people towards doctors and their science, Gregory seems more antagonistic toward lay physicians than the other Merovingian writers. However, since a greater number of his works are available, it is easier to ascertain his opinion than that of other contemporary writers. Yet even Gregory did not approve the execution of the doctors whose patients had died. The flattering terms used in describing doctors by Salvian and the anonymous writer of the Life of Saint Caesarius indicate that these chroniclers had some faith in the therapeutic ability of doctors. In the Carolingian period Charlemagne seems to have had little respect for his court physicians, yet his laws reveal governmental interest in medical treatment for the people. There were probably Carolingian state hospitals. There were also definite regulations for the segregation of lepers; these laws were probably more strictly enforced than in Merovingian times. Charlemagne also recommended the cultivation of medical plants in the royal gardens. In contrast to Gregory, the Carolingian clergy seem to have had a high opinion of doctors. Lupus was proud of the ability of his monastic doctors. Walafrid appreciated the art

of the doctor. However, the hagiographer, Eigil, wrote contemptuously of the inability of Wintarus, royal physician of Charlemagne. Probably the monastic doctors were better trained; and, because of this and their religious prestige, were better appreciated than the royal physicians of this period. The wide application of the Benedictine rule in contemporary monasteries suggests that the Benedictine principle of caring for the sick was generally practiced in the monasteries of the times. Doctors were considered absolutely necessary for treating wounds in the Carolingian period. Both the prophylactic and therapeutic features of medicine were appreciated, and warning was given against extreme remedies.

Churches, hospitals, and leper quarters, were used in both the Merovingian and Carolingian periods for housing the sick; most of these had a religious foundation.

The presence of strictly lay hospitals is difficult to determine. Probably Brunehilda established one at Autun near the close of the sixth century; and in the seventh century there may have been leper quarters at Metz and Verdun, and a hospital in Paris. In the Carolingian period Charlemagne extended his protective policy to hospitals, ordering that all which needed repairing should be restored; church councils also issued many decrees concerning the erection of hospitals. Probably after Charlemagne there was a period, comparable to the pre-Carolingian era, in which hospitals declined. It is probable, however, that the Hôtel Dieu in Paris was founded in

the ninth century, and that other maisons-Dieu were begun during this century. Bishop Hincmar of Rheims also made special provision for the sick of his diocese. The infirmary of Saint Gall is the most striking example of the application of the Benedictine idea of hospitals. Its plan reveals provisions for specialized training and practice; but probably this hospital was above the average in equipment. There may also have been secular hospitals established by nobles. The school in or near the palace of Charlemagne seems to have been a secular hospital. However, probably the majority of hospitals in Merovingian and Carolingian Gaul had a definite religious connection. The records show approximately as many Merovingian hospitals as Carolingian; but there is no indication that the plans of the earlier hospitals were as good as those of the Carolingian period.

Was there a Carolingian Renaissance in medicine? "Renaissance" seems too strong a term to apply to the medicine of this period. Yet it is clear that there was a decided improvement in this science theoretically and practically. Abstract concepts of disease and its causation were expressed, revealing an emphasis on physiological phenomena. Even the ideas of spiritual causation were more systematically organized than in the Merovingian period. Preventive methods of treatment were used. In contrast to the many miraculous cures recorded in Merovingian sources are the numerous physical remedies found in Carolingian writings. The absence of accounts of supernatural

remedies found in Carolingian works indicates less credulity in this period. Doctors were more respected and had better educational advantages. Medicine itself held a definite place in the curriculum and was of equal importance with the subjects in the quadrivium and trivium. Hospital plans suggest medical specialization.

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